사회복지학석사학위논문

The Relationship between Academic Stress and Depression among Korean Adolescents

—The Moderating Effects of Perceived Self-Efficacy and Parental Support—

청소년의 학업 스트레스와 우울의 관계 연구

인식된 자기효능감과 부모 지지의 조절효과

2019 년 8 월

서울대학교 대학원

사회복지학과

박 숙 영

The Relationship between Academic Stress and Depression among Korean Adolescents

-The Moderating Effects of Perceived Self-Efficacy and Parental Support-

지도교수 이 봉 주

이 논문을 사회복지학 석사학위논문으로 제출함

2019년 6월

서울대학교 대학원

사회복지학과 사회복지학 전공

박 숙 영

박숙영의 석사학위논문을 인준함

2019년 7월

위 원 장 유 조 안 (인)

부 위 원 장 한 윤 선 (인)

위 원 이 봉 주 (인)

Abstract

Many studies have already pointed out problems relating to the relationship between academic stress and depression. However, despite such interest from researchers, depression arising from academic stress continues to plague Korean adolescents. The emphasis on alma mater is widespread in Korean society. Consequently, adolescents' competition to obtain a place at a top university is real. This struggle results in academic stress which leads to lower life satisfaction and happiness levels.

This study deemed the 3rd year of middle school as a crucial stage in adolescents' mental health issues. Adolescents must, at least tentatively, decide on their career path; studies have reported adolescents to be the most depressive overall then; adolescents are under the most stress from their parents; and, they are at the peak of self-efficacy.

It is difficult to conjure a social solution to the influence academic stress has on adolescent depression. Nevertheless, it is possible to study and analyze factors that may protect adolescents on an individual level. Among the protective factors that alleviate adolescent depression, this study will focus on perceived self-efficacy and parental support. Although research has been conducted on perceived self-efficacy and parental support respectively, few studies have valued a simultaneous emphasis (note: this is not a simultaneous analysis) on perceived self-efficacy and parental support.

One can consider two facets to moderating factors in the relationship

between academic stress and depression for Korean adolescents: the person and situational factors. Social support alone does not suffice in explaining what leads to low, or high, morale. Concerning the person factor, “Everyone needs resilience,” and self-efficacy is a subordinate concept of self-resilience. For the situational factor, a child’s perceived relationship with their parents can lead to higher levels of resilience. A study also showed that among protective factors leading to adolescent resilience, parental support showed the highest frequency.

The theoretical framework of this study is Lazarus and Folkman’s (1984) cognitive theory of stress, appraisal, and coping. There are five components in this theory: (1) stress, (2) appraisal, (3) coping, (4) emotions, and (5) morale. Among the components of this theory, this study will deal with mainly (1) stress, (2) appraisal, and (5) morale. This study will not deal with coping due to the fact that the nature of its focused moderator variables, which are perceived self-efficacy and perceived parental support, are “appraisal” and not “coping”. Neither is depression “emotion”; it is a type of negative morale.

First, (1) stress in this study is “academic stress”, which is the independent variable. Second, (2) cognitive appraisal (of stress), includes the moderator variables “perceived self-efficacy” and “perceived parental support”. In other words, if one thinks they can control a stressful situation well (i.e. self-efficacy, Lazarus & Folkman, 1984), the outcome the person with high self-efficacy experiences will differ substantially in quality with the

person with low self-efficacy. On the other hand, perceived parental support (cognitive appraisal) that an adolescent retains on an everyday basis becomes the basis for an adolescent's belief that they will receive parental support in time of need. Thus, this study sees "perceived parental support" as the second moderator variable in the relationship between academic stress and depression for adolescents. Finally, the (5) morale part of the process includes depression.

Concerning empirical research, many consistently show that adolescents' academic stress spawns negative mental health problems such as depression. Various studies also attest to the moderating effects of self-efficacy, in a variety of mental health-related situations. Although most literature reported a moderating effect of parental support in the relationship between stress and depression for adolescents, a few studies showed mixed results, such as different types of groups having different results.

Therefore, this study will examine firstly the effect of academic stress on adolescent depression, and secondly whether self-efficacy and parental support have a moderating effect on the relationship between academic stress and depression. The three hypotheses to be examined are as follows.

[Hypothesis 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd-year middle school students.
[Hypothesis 2]: Perceived self-efficacy will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school

students with higher perceived self-efficacy levels.

[Hypothesis 3]: Perceived parental support will moderate the relationship between academic stress and depression such the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived parental support levels.

This study uses Korean Children and Youth Panel Survey (KCYPS) data following 4th year elementary school students into the 6th year of the survey, 2015, when the subjects were in their 3rd year of middle school. A total of 2,061 students were surveyed. From the KCYPS research table, ten questions relating to depression were used to measure depression, and five concerning studying habits were used to measure academic stress. Four from the category of self-identity, that by face validity reflects Sherer et al.'s (1982) original scale on self-efficacy, were used to measure self-efficacy. Four from the category of parental affection/attachment were used to measure parental support, given that Tsai et al. (2018) cites Armsden and Greenberg's (1987) scale on parent-child "attachment" and uses it interchangeably with the words "parental support", and Bong-eun Seo (2009) reports parental attachment is a subordinate factor of parental support.

Concerning the results, the researcher examined sample characteristics, descriptive statistics, and correlation coefficients. Following this, the relationship between academic stress and depression was examined. Then, through hierarchical regression analysis, the moderating variables —

self-efficacy and parental support — were inserted into the equation, along with their interaction terms.

Study results are as follows. Firstly, this study supports the first hypothesis that as academic stress increases, depression increases. Secondly, the second hypothesis was supported in that self-efficacy proved to be a significant moderator variable in the relationship between academic stress and depression. Thirdly, the third hypothesis was rejected in that parental support proved to not be statistically significant in moderating the relationship between academic stress and depression. The regression coefficient of the interaction term of academic stress and parental support was not statistically significant.

Past research also presents mixed results similar to that of the third result of this study, which was a rejection of the original hypothesis—a lack of statistical significance in the moderating effects of parental support. In other words, the relationship between academic stress and depression for Korean adolescents with high stress levels cannot be significantly moderated by parental support. Additionally, the fact that the 3rd year of middle school is highest in parental stress may hinder the affect parental support has on the relationship. The second result may be supported or elucidated by the fact that the 3rd year of middle school is highest in self-efficacy. Conclusively, the result that self-efficacy is statistically significant as a moderator in the relationship between academic stress and depression for Korean adolescents, holds many theoretical and practical implications for studies on social welfare.

Key Words: depression, academic stress, perceived self-efficacy, perceived parental support, moderating effect, transactional model of stress and coping

Student Number: 2016-28652

Table of Contents

List of Tables

List of Figures

I. Introduction

Depression is a type of negative morale, as Lazarus and Folkman (1984) put it, and is very frequently experienced among adolescents (according to the KCYPS, adolescents would refer to middle and high school students) in South Korea. According to the 13th Adolescent Health Behavior Online Survey (Korea Center for Disease Control and Prevention, 2017), conducted on South Korean middle and high school students, 30.3% of all female students and 20.3% of all male students surveyed had "felt within the past twelve months, sadness or despair strong enough to make [themselves] suspend daily life activities for a duration of two weeks".

There are various stress types leading to adolescent depression. According to Frydenberg (2008), an adolescent's everyday stress is caused by "academics, peer relationships, and family relationships, among other factors" (as cited in Kim & Park, 2013). Out of the types of stressors mentioned, adolescents experienced academic stress the most. It is reported that academic stress is the "main factor" associated with depressive symptoms (Schraml, Perski, Grossi, & Simonsson-Sarnecki, 2011; Wilks, 2008). Even in studies on adolescent academic stress and depressive symptoms, comparing the United States, China, Japan, and Korea, Korea's academic stress levels are highest, and depressive symptoms caused by this academic

stress are reported to be of high levels (Yom & Cho, 2007; Hong et al., 1994; Hwang, 2008; Ang & Huan, 2006; Lee & Larson, 2000).

This is important because it highlights the dire need for a solution to academic stress and the depressive symptoms it causes in Korea. Even suicide rates in Korea show that the problem of depression caused by stress is a pressing issue (Lee, Choi, & Kong, 2010). To emphasize this, Nho and Kim (2012) reported that "72.6% of Korean adolescents point to academics as the reason for stress". This contrasts with what Erikson pointed out to be stressors for adolescents, such as the issue of identity versus confusion, or forming relationships, among others.

Many studies have already pointed out the problems relating to the relationship between academic stress and depression (Kim, Lee, & Chung, 2013a; Moon, 2008; Park & Chung, 2010). However, despite such interest from researchers, and despite the alacrity of South Korean society, South Korea's education system — one highly focused on university admission and a standardized and competitive school ambience — causes academic stress for South Korean adolescents. This is because Korean culture emphasizing school name, or alma mater, and nepotism (*yeon-go-ju-eui*: emphasis on relationships stemming from what community or group or organization one is a part of) is widespread in Korean society, and there are limited places for undergraduate admission at top universities in Korea. Therefore, the competition to obtain one of these places is real. This struggle manifests itself in academic stress. With time, this leads to lower life satisfaction and

happiness levels (Kwon, Lee, & Song, 2012).

Among the years of adolescence in Korea, the 3rd year of middle school, or the last year of middle school, is a time for adolescents to decide whether to apply for an academic high school, a vocational high school, or a language- or science- (etc.) related high school. That is one reason why stress would be higher during the 3rd year of middle school. This study deemed the 3rd year of middle school as a crucial stage in adolescents' mental health issues. For example, it is a stage which studies have reported to be the most depressive overall (Shin & Lee, 2011; Bae, 2016), and a stage in which the adolescent is under stress due to parents (Lee, 2018). Empirical evidence supporting these reports is shown in several studies. In Shin and Lee (2011), the years with the highest mean in parental stress and depression levels respectively, from the 3rd year of middle school to the 3rd year of high school, are both the 3rd year of middle school. Bae (2017) also performed a longitudinal study on depression levels for students from the 2nd year of middle school to the 1st year of high school, and similarly, the highest mean for depression levels was in the 3rd year of middle school. Furthermore, Lee (2018) conducted a study on eigenvalues for parental stress and self-efficacy according to grade, from the 2nd year of middle school to the 2nd year of high school, and the 3rd year of middle school proved to be the highest in both parental stress and self-efficacy.

Existing studies concerning the relationship between academic stress and depression have overlooked the singular importance of the 3rd year of

middle school. As shown above, because the 3rd year of middle school is so critical, the researcher of this study examined this particular year in an adolescent's life.

An important point to note is that policy makers and practitioners have not been able to prevent, nor find a solution to, the problem of academic stress regarding adolescent depression. Although it is difficult to conjure a social solution to the influence academic stress has on adolescent depression, it is possible to study and apply factors that may protect adolescents on an individual level. Factors that alleviate adolescent depression that have been researched are as follows: an easygoing temperament (Cicchetti & Rogosch, 1997), a warm and supportive relationship with parents (Gong & Kim, 2017; Moon, 2008; Park, Kim, & Park, 2014), self-efficacy and high self-esteem and confidence along with age-appropriate self-reliance (Denny, Clark, Fleming, & Wall, 2004; Gong & Kim, 2017; Kim, Oh, & Kim, 2012; Kwon, 2012), and excellent intellect with adaptive problem solving and coping techniques (Dallaire et al., 2006).

Among these protective factors, this study focused on perceived self-efficacy and parental support. To emphasize the value of this study: existing studies concerning the relationship between academic stress and depression for Korean adolescents have not examined the stage of "appraisal" according to Lazarus and Folkman's (1984) theory, nor simultaneously examined person and situation factors. Most existing studies have focused on the "coping" stage of Lazarus and Folkman's theory, or focused on either the person or

situation factors alone (Moon, 2008; Yoo, 2018, among others). The researcher of this study applied Lazarus and Folkman's theory to a study on "appraisal", while including both person and situation factors.

Unlike most existing studies that focus on the coping stage, this study examined the appraisal stage of Lazarus and Folkman's (1984) theory. This is because Lazarus and Folkman's theory reports that psychological stress is "determined by the person's appraisal" of an encounter with the environment. According to Lazarus and Folkman, this "appraisal is shaped by person factors including…beliefs" (Lazarus & Folkman, 1984: 289).

In detail, the reason self-efficacy and parental support were chosen was because they represent influential factors well. In detail, one can consider two facets to moderating factors in the relationship between academic stress and depression, for Korean adolescents. They are the person factor and the situation factor (Lazarus & Folkman, 1984). First, the person factor has two "characteristics": commitments and beliefs (Lazarus & Folkman, 1984: 55). These variables affect appraisal by "(1) determining what is salient for well-being in a given encounter; (2) shaping the person's understanding of the event, and in consequence his or her emotions and coping efforts; and (3) providing the basis for evaluating outcomes" (Wrubel, Benner, & Lazarus, 1981; Lazarus & Folkman, 1984: 55). According to Reivich and Shatte (2002), "Everyone needs resilience, because … life includes adversities." Reivich and Shatte (2002) explain resilience as the capability "to persevere and adapt when things go awry" and report that when one has higher resilience levels,

one is able to “overcome” life’s adversities (Reivich & Shatte, 2002:1). Further, self-efficacy is a subordinate concept of self-resilience (Reivich & Shatte, 2002).

On the other hand, for the situational factor, it is known that attachment is a subordinate factor of social support (Kahn, 1979; Kaplan et al., 1977). Also, parental attachment is a subordinate factor of parental support (Seo, 2009). Concerning parental support, then, a child’s perceived relationship with their parents can lead to higher levels of resilience (Tamura, 2018). In other words, youths with positive perceptions of parent-child relationships have higher adjustment levels to adversity. Also, according to Moon’s (2017) study, among protective factors leading to adolescent resilience, parental support was the factor that showed the highest frequency — this attests to the importance of parental roles in adolescence. Further, parental interest and participation in adolescent academics was the second most important factor. In other words, when parents show interest in children’s academics and provide sufficient support for necessary aspects, this is a great protective factor for adolescent resilience. Therefore, among the external influences adolescents receive, parental support is the most fundamental and necessary in shaping their views of themselves.

Perceived self-efficacy and parental support are studied as moderators. This is because, Lazarus and Folkman used Johnson and Sarason and other neobehaviorist ideas (shown in a model [Lazarus & Folkman, 1984: 305] that illustrates the neobehaviorist line of research, and includes the main

mediating ["moderating"; Lazarus & Folkman, 1984: 304] variables of interest) and developed them a step further ([Lazarus & Folkman, 1984: 307]; this model illustrates Lazarus and Folkman's transactional, process-oriented research).

To give some background information, which is included in Lazarus and Folkman's (1984) text, neobehaviorists originally thought of the stress-coping model as linear (Stimulus-Organism-Response). That is why early neobehaviorists thought of the middle stages of "appraisal and coping" as mediator variables. However, more of the recent neobehaviorists — including Johnson and Sarason (1979a, b) — think differently, or have "developed" their thinking about the processes. While using the label "mediating variable", in reality they study the processes of "appraisal and coping" as moderating variables. They mention this in their writings (Johnson & Sarason, 1979a, b). To emphasize this fact, Lazarus and Folkman mention that Johnson and Sarason see as moderating variables the following: social support and perception about control of situation, in the relationship between stress and outcome.

The difference between the model showing neobehaviorism and Lazarus and Folkman's model is this: Lazarus and Folkman upgraded neobehaviorist ideas. They upgraded, by portraying, in their model, the processes repeatedly (longitudinally) and directly. In effect, the difference between the neobehaviorist model and Lazarus and Folkman's model is not whether or not they use mediating and moderating variables, but rather the

repeated and direct portrayal of processes. In a nutshell, a common characteristic of the two models is that, although they use the label of "Mediating Process", in reality the role of the variables within that process are that of "Moderators".

Therefore, this study aims to emphasize the importance of perceived self-efficacy and parental support, which help South Korean adolescents gain confidence concerning both themselves and their perceived social support, so as to help alleviate depression caused by academic stress. Hence, because there is a need to study academic stress, depression, and moderators to the two variables' relationship, according to the statement of the problem and significance of the study aforementioned, this study examined firstly the effect academic stress has on adolescent depression, and secondly whether self-efficacy and parental support have a moderator effect on the relationship between academic stress and depression. This is to provide a fundamental resource for social welfare policies and practice for the well-being of South Korean adolescents.

In detail, implications of this study would be to provide ground-level evidence. This evidence would, for example, support the development of intervention programs that alleviate the relationship between academic stress and depression among adolescents, through raising self-efficacy and parental support levels. In a word, this study would be able to provide support to develop perceived self-efficacy and parental support intervention programs for South Korean adolescents.

This study's goal is to provide a fundamental resource to show that perceived self-efficacy and parental support are important as protective factors in the relationship between academic stress and adolescent depression. Therefore, the research questions and hypotheses this study would examine are as follows.

Research Question 1: What is the relationship between academic stress and depression, for Korean 3rd-year middle school students?

[Hypothesis 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd-year middle school students.

Research Question 2: Do perceived self-efficacy, and parental support, moderate the relationship between academic stress and depression, for Korean 3rd-year middle school students?

[Hypothesis 2]: Perceived self-efficacy will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived self-efficacy levels.

[Hypothesis 3]: Perceived parental support will moderate the relationship between academic stress and depression such the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived parental support levels.

II. Theoretical Framework

The theoretical framework of this study is Lazarus and Folkman's (1984) transactional model of stress and coping. According to Lazarus and Folkman's theory, there are five stages to keep in mind: (1) stress (stimulus), (2) appraisal, (3) coping, (4) emotions, (5) morale (including depression).

According to Lazarus and Folkman (1984), firstly, stress is mostly thought of as a stimulus. Lazarus and Folkman (1984:19) define the sphere of stress as follows.

> *Psychological stress is .... [the] relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being.*

Secondly, appraisal refers to the cognitive meaning or significance of a stressful event. Person factors influencing cognitive appraisal include commitments and beliefs. Among the latter, Lazarus and Folkman are particularly interested in beliefs about personal control and existential beliefs. In beliefs about personal control, situational appraisals of control point to expectations concerning control of a person's response to an event. Situation factors influencing cognitive appraisal include threat, harm, or challenge.

Thirdly, coping refers to "constantly changing cognitive and

behavioral efforts to manage … demands that are appraised as taxing" (Lazarus & Folkman, 1984:141). Coping can be distinguished from automatized adaptive behaviors. Coping largely serves two functions: problem-focused and emotion-focused coping.

The fourth (emotions) and fifth (morale) factors in this sequence combine to construe outcomes. An important issue to researchers is outcomes, or how appraisal and coping affect social functioning, morale, and somatic health. Lazarus and Folkman report that stress results depending on how family and work roles are valued, and how "conflict, ambiguity, and overload are coped with" (Lazarus & Folkman, 1984: 259).

Therefore, fourthly, (4) emotions, which are not examined in this study, refer to feeling as a result of appraisal (Lazarus & Folkman, 1984: 45). Lazarus and Folkman report that cognitive appraisal is a necessary feature of emotion (277). In fact, they argue that cognitive appraisal "always mediates" emotions (278).

Lastly, depression would be included in (5) morale. As Lazarus and Folkman explain, "morale" is one of the most important outcomes of stress. Also, according to Lazarus and Folkman, if morale is not increased, depression forms. These are the reasons why depression was decided upon as the dependent variable. Aside from Lazarus and Folkman's theory, depression is important because it is reported to be the greatest factor leading to Korean adolescent suicide.

This study deals with mainly (1) stressors/stress/stressful situations, (2) appraisal, and (5) morale. This study does not deal with (3) coping, because the moderator variables, which are the variables mostly in question in this study, are seen as part of the appraisal process only (Lazarus & Folkman, 1984). Also, among outcomes, this study does not examine (4) emotions, because depression can be categorized under morale and not emotions.

First, (1) stressors/stress/stressful situations in this study is "academic stress", which plays the part of independent variable. Academic stress, as a stressor, affects morale. In detail, the (5) morale part of the process includes depression. This is because a maladaptive outcome of not being able to appropriately cope with a stressful situation is negative morale. When one does not cope with stress appropriately due to internal attrition concerning failure, one's self-esteem decreases, and the possibility of depression rises (Weiner, 1974, as cited in Lazarus & Folkman, 1984; Weiner, Graham, & Chandler, 1982; Weiner, Russell, & Lerman, 1978; 1979).

Next, (2) cognitive appraisal (of stressors/stress/stressful situations), includes the moderator variables "perceived self-efficacy" and "perceived parental support". Concerning (2) cognitive appraisal, theoretically, Lazarus and Folkman (1984) report that there are two stages: primary and secondary. When a person receives stress, the person makes a cognitive appraisal of whether the situation is a stressful one (primary appraisal), and whether the person can control the situation (secondary appraisal). Primary appraisal is

the process of an individual categorizing situations as either irrelevant, benign-positive, and stressful (harm/loss, threat, challenge). Secondary appraisal consists of outcome expectancy and efficacy expectation. The former is a person's appraisal that a certain behavior would lead to specific outcomes. The latter is a person's belief that they can perform behaviors required to end in these specific outcomes (Lazarus & Folkman, 1984).

Secondary appraisal is an appraisal, therefore, of whether one can control a situation, and may be referred to Lazarus and Folkman (1984)'s "situational control appraisal". Therefore, Lazarus and Folkman state, "situational appraisals of control parallel Bandura's concept of self-efficacy" (Lazarus & Folkman, 1984: 69) and Bandura's "efficacy expectancies[1] are part of secondary appraisal" (Bandura, 1977; Lazarus & Folkman, 1984). According to Lazarus and Folkman (1984), efficacy expectancies influence the degree to which a person feels threat and also affect coping options. Lazarus and Folkman connect Bandura's ideas with their own by couching Bandura's ideas of efficacy expectancies as a part of Lazarus and Folkman's secondary appraisal. This secondary appraisal includes evaluating other coping behaviors.

In other words, if one thinks they can control a situation well (i.e. self-efficacy), even if they are in a stressful situation, the outcome the person

[1] For further information on this term, please see in this paper, III. Literature Review, 1. Definitions and Characteristics of Key Terms, 3) Perceived self-efficacy.

with high self-efficacy experiences would differ substantially in quality with the person with low self-efficacy. Therefore, self-efficacy plays the role of, and has, a moderator effect on outcomes. Hence, this study used self-efficacy, a generic concept of efficacy expectancy, as the first moderator variable that influences the relationship between academic stress and depression for adolescents.[2]

On the other hand, when an individual makes an appraisal of a stressful situation, this also includes an appraisal of the social support they retain. In other words, if the individual is receiving social support on an everyday basis, they will make an appraisal that they are going to receive it when in a stressful situation requiring this support (Lazarus & Folkman, 1984: 259).

Likewise, parental support is a form of social support, and possibly the most important in adolescence. The perceived parental support (cognitive appraisal) that an adolescent retains on an everyday basis becomes proof that an adolescent will receive parental support in time of need. In this manner, this study sees "perceived parental support" as the second moderator variable in the relationship between academic stress and depression for adolescents, and examined the hypothesis of whether an adolescent's high perceived parental support would influence coping outcomes in a positive way.

[2] Many other studies (Kim & Sin, 2001; Kwon, 2012; Pintrich & DeGroot, 1990) report the relationship between self-efficacy and stress coping, and the coping strategies for stressful situations change according to self-efficacy levels.

However, in this study, perceived parental support was considered a moderator variable for only the appraisal process, excluding the role of received parental support in the coping process.

In detail, perceived parental support, as a subconcept of perceived social support, is how interactions in interpersonal relationships are evaluated by the individual concerning their supportiveness. Gore's (1978) study of 100 men who were laid off when a factory closed, showed lack of support associated with higher levels of depression. Therefore perceived social support is not outcome, but part of the influencing factor that leads to outcome.

Although social support *may* fall under the category of coping (but not outcomes), it is either receiving (coping) or believing that one will receive (appraisal) social support, when needed. Therefore, there is a clear distinction between whether social support would fall under coping or appraisal, and perceived parental support undoubtedly categorizes under appraisal, according to Lazarus and Folkman's (1984) theory that places perceived social support as appraisal.

One point to note is that because Lazarus and Folkman's theory was constructed strictly according to "Ipsative-Normative Design" (which examines person and environment factors), it is just as the name is. Personal, or inner, factors (in other words, having to do with internal design; therefore related to *self-efficacy*), and environment-relational factors (therefore related to *parental support*) may both be examined by Lazarus and Folkman's theory ("processes within the person and within the environment combine to

determine the relationship between the two": Lazarus & Folkman, 1984: 114, 360)

Therefore, the social system variable cannot be independently examined is because Lazarus and Folkman (1984: 288) state, even if social system variables work as a type of mold for psychological processes (Kemper, 1978), more at the individual level is needed to influence psychological characteristics. In other words, if psychological characteristics are not put into the equation with social variables, then analyzing from the macro to the micro level is hazardous (288).

Another reason why beliefs about self must be examined along with the social system variable, because the process of stress, coping, and adaptation is only partly explained by the individual embedded in the social system. In other words, social structural variables are not the only variables that influence how people appraise "harm, threat, or challenge". While it is true that the person is partly affected by social history, and acts accordingly, they are also individuals, with constantly changing belief systems, commitments, and agendas. Variables such as beliefs and commitments that shape appraisals, along with the "demands, constraints, and resources" of the environment, help people understand sources of stress and methods of coping (Lazarus & Folkman, 1984: 233).

Perceived self-efficacy and parental support are included in the appraisal stage and not the coping stage because social and psychological

levels can be included in the former. Put differently, the relationship between stress at the social level and stress at the individual/psychological level are linked by cognitive appraisal (Lazarus & Folkman, 1984: 289). Also, perceived factors are part of the appraisal process, because they are a part of situational control evaluation—hence, appraisal.

On another note, a plethora of studies have been conducted using Lazarus and Folkman's (1984) transactional model of stress and coping. All of the studies mentioned in the following paragraph have uniformly focused on the outcome, itself, of stress-appraisal-coping processes, such as adaptation, while the present study focuses on the moderating effects of factors.

While one study integrated Lazarus and Folkman's (1984) concept of stress into the academic field, developing an "academic stress scale" (Cho & Kim, 2018), others focused on the concept of "adaptation" (Park & Seong, 2016; Kim & Seo, 1997). This contrasts with the present study, as the present study focuses on lessening depression through strengthening moderator factors. A few studies focused on Stress Management Programs and their effectiveness (Kim, Heo, Kang, & Kim, 2004; Park & Seong, 2016; Lee, Jeong, & Ha, 2002). While the present study does not focus on intervention programs, perhaps these programs may be useful in finding meaning concerning stress types. Nam and Park (2004) focused on the relationship between social support and coping behavior. Comparatively, the

present study focuses on social support as appraisal, and depression as morale. Interestingly, a couple of studies used the concept of perceived stress (Kim, Park, Kim, & Lee, 2015; Lee, Jeong, & Ha, 2002). This differs from the present study, which uses the concept of perceived appraisal factors.

On the other hand, the following studies have focused on the mediating effects of factors. These factors include Emotional Regulation (Kim, Park, Kim, & Lee, 2015; Jang & Shin, 2016; Mun, Shin, & Lee, 2017), Emotion (Lee, 2014), and Ego-Resiliency (Lee & Seonwoo, 2011). These differ from the moderators of parental support and self-efficacy, not only in methodology, but also in the fact that they look mostly inwardly for coping strategies (as opposed to parental support). Also, they mostly measure responsive patterns to stressors and difficult situation, and do not measure inherent perceptions. Further, an interesting study was conducted on a "cognitive set" which consists of social support perception and self-perception (Lim & Jeong, 2003). This also focused on the mediating effect of social support perception on other factors.

Overall, the fact that the present study examines the moderating effects of self-efficacy and parental support, distinguishes this study from other studies focusing on outcomes such as adaptation, or mediating processes including that of Emotional Regulation, among other factors.

III. Literature Review

1. Definitions and Characteristics of Key Terms

1) Academic stress

According to Son (2012), academic stress refers to uncomfortable psychological states, including psychological burden, tension, worry, fear, and depression, concerning academia. Although grades and tests can be a main factor in contributing to academic stress (Kim, 2009; Kwon, 1998), the everyday environment and atmosphere of competition among Korean adolescents would also be duly important in considering the factors contributing to academic stress. There exists a culture, in Korea, of emphasizing "school names" as alma maters, and of nepotism. The competition to obtain a place at a prestigious university, is real. It is at once a struggle with other students and a struggle with oneself. The struggle to vie for a "place" causes stress, taking the form of academic stress.

In other words, academic achievement is important to Korean adolescents, and they receive much pressure due to the emphasis placed on it. Previous studies show that academic stress is the biggest pressure factor for Korean adolescents (Park & Shin, 1991; Lee, 1996). Park and Kim go as far

as to say Koreans consider academic achievement as the greatest achievement in one's life (Park & Kim,1998) and academic failure to be "the most painful" type of failure in one's life (Park & Kim, 1999). In other words, Koreans think of academic failure as a hindrance for adolescents' futures. Aside from the desire to climb the social ladder through being admitted to a top school in Korea, Confucian values influence Korea's "obsession" with academic achievement. According to Park and Kim (2016), strong attachment to children's education and achievement is frequently found in Confucian tradition-abiding societies (Hofheinz & Calder, 1982). Conclusively, it is a known fact that the stress levels regarding academia for Korean children are very high (Lee & Kim, 2000). In this study, academic stress is defined as feelings of unmanageable burden concerning academia for 3rd year middle school students.

2) Depression

This study operationally defines and conceptualizes depression as follows. According to Kim, Kim, and Lim (2013), depression refers to "a feeling or emotion that an adolescent feels in everyday life—a feeling that they are depressed; rather than being diagnosed with depression according to clinically and pathologically classified criteria such as the DSM." According to Choi and Lee (2010), a depressive feeling is "the degree to which one feels, during the most recent week, loneliness, pent-up gloominess, and futility".

Son (2012) states that depression ranges from a light depressive mood ("a psychological cold" [Jung, 2008]) as a general emotional experience, to a clinic-pathological state. Depression includes feeling sad, lonely, and empty, with a loss of interest and joy. It can accompany sleeplessness, loss of appetite, and fatigue. It can also accompany self-criticism, self-deprecation, senses of guilt and worthlessness, and decrease in thinking abilities and attention span (Beck, 1967, as cited in Shin, 2017).

Experts predict that the occurrence age for depression will decrease over generations (Kwon, 2003). International scholars Reinherz, Giaconia, Hauf, Wasserman, and Paradis (2000) report that adolescents between ages 15 to 18 (the equivalent of 3rd year-middle school to 3rd year-high school students in Korea), regardless of nationality, are more susceptible to and have

higher rates of recurring depression.

In reality, depression is accompanied by multiple side effects. Lim (2013) reports that depression causes adolescent problematic behavior such as being irritable, acting rebelliously toward parents, being aggressive, skipping school, and running away from home. Beck (1976) reports also that depression influences people negatively overall, from perception, cognition, judgment, memory, thinking and attitudes, to interpersonal relationships. In this study, depression is defined and characterized as feelings of "doom and gloom" such as loneliness and despair.

3) Self-efficacy

According to Bandura (1977)'s "Self-efficacy theory", self-efficacy is the belief that one retains the ability to successfully implement the necessary actions to obtain a certain outcome. Schunk (1991) defined self-efficacy as judgment on how well one can orchestrate and implement actions in unpredictable situations, and Wood and Locke (1987) reported self-efficacy as a personal estimation of one's ability to perform concerning a task. Kim, Oh, and Kim (2012) defined self-efficacy to be the belief that one can attain to complete one's task by overcoming situations, and Park (2012) reported self-efficacy as individual judgment or belief in one's ability to reach planned action levels, and to organize and implement necessary actions or activities.

According to Bandura (1977), two subordinate concepts of self-efficacy include *efficacy expectancy* and *outcome expectancy*. *Efficacy expectancy* refers to deciding how much effort to put into a situation, and how much to persevere in the face of obstacles and negative events. When one has efficacy expectancy, a person is able to continue making efforts to attain positive outcomes. *Outcome expectancy* refers to making an appraisal that there would be an outcome to the coping actions one takes. The subordinate concept used for measurement in this study is *efficacy expectancy*, due to the fact that it is considered (Lazarus & Folkman, 1984) a part of situational control appraisal, as mentioned in the Theoretical Framework (please see

pages 10 to 11 for a detailed explanation on the relationship between Bandura's ideas and Lazarus and Folkman's ideas), hence a part of the appraisal process.

Park and Kim (2016) report that self-efficacy influences not only stress but also depression levels. Bandura (1997) explained that cognitive non-efficacy, which causes negative and depressed thoughts to continue, is related to a continuum of depression and the enforcement and recurrence of depression.

The reason perceived self-efficacy is included in the appraisal stage is because Lazarus and Folkman (1984) couch Bandura's ideas in their frame of reference. As efficacy expectancy is a subordinate concept of self-efficacy, Lazarus and Folkman reported that efficacy expectancy is part of secondary appraisal, or the second part within the stage of appraisal. According to the two researchers, efficacy expectancies enter the individual's evaluation of the situation, and determines emotion and coping (Lazarus & Folkman, 1984: 70). They emphasize that coping actions are taken because of the effect of "the efficacy expectancies on the persons' appraised *relationship* with the environment" (Lazarus & Folkman 1984: 70-71).

There is also a consequence of self-efficacy being a part of the appraisal stage. In detail, self-efficacy is also related to perceived parental support being a part of the appraisal stage. In short, an "appraisal does not refer to the environment or to the person alone, but to the integration of both in a given transaction. As such, it is a transactional variable" (Lazarus &

Folkman, 1984: 294). In this study, perceived self-efficacy is defined as the perception of one's ability to reach established goals, both generally and socially.

4) Parental support

A subordinate factor of social support is “affection/attachment”. First, this is supported by Kahn’s (1979) study. Kahn (1979) construed social support as follows: “affect, affirmation, and aid are the three components of supportive transactions”. Kahn also defined social support as “interpersonal transactions that include one of more of the following: the expression of positive affect of one person toward another; the affirmation or endorsement of another person’s behaviors, perceptions, or expressed views; the giving of symbolic or material aid to another” (Kahn, 1979: 85; Norbeck, Lindsey, & Carrieri, 1981). In other words, affection is a subordinate factor of social transactions, or social support. Second, the statement that affection is a subordinate factor of social support is supported by Kaplan et al.’s (1977) study. Kaplan et al. (1977) reported that social support is fulfilled when the following two factors are provided: “socioemotional help (e.g., affection, sympathy and understanding, acceptance, and esteem from significant others)” and “instrumental help (e.g., advice, information, help with family or work responsibilities, financial aid)”. Kaplan et al. also reported that basic social needs include affection, esteem or approval, belonging, identity, and security (Thoits, 1982). In other words, a subordinate factor of social support is “affection/attachment”.

Further, Seo (2009) operationally equated “Within family social capital” to “parental support” and limited the concept of “Within family social

capital" to (1) parental attachment (2) parental monitoring and (3) parental expectation. In other words, parental support or "Within family social capital" was construed of (1) parental attachment, (2) parental monitoring, and (3) parental expectation. Therefore parental support is not a subordinate factor of parental attachment; parental attachment is a subordinate concept of parental support.

On another note, perceived social support is a subjective evaluation regarding supportiveness in social relationships (Lazarus & Folkman, 1984). Because perceived social support is an evaluation, the researcher of this study has placed perceived social support under the process of appraisal ("believing") and not coping ("receiving"). Kaul and Lakey (2003) found that just the perception of social support availability is more important to well-being than the actual receiving of social support.

Tsai et al. (2018) used Armsden and Greenberg's (1987) scale on parent-child "attachment" and termed it "parental support". According to Huh (2000), parental "affection" refers to complimenting and loving children through linguistic and non-linguistic actions such as physical touch (i.e. hugging) which form closeness. This shows the child that the parent respects and accepts the child (Shin, 2017). Park, Kim, and Han (2014) report that "affection" is showing that the parent is respecting and accepting the child and is sensitive to the child's needs. As one of the types of social support most familiar to adolescents, parental support and parental affection are terms that are used interchangeably (Kim, Epstein, & Moon, 2016).

According to Park and Kim (2016), the parent-child relationship is the most fundamental human relationship. That is why Park and Kim studied and are interested in parent-child relationships among environmental factors, and among the relationship-related factors are interested in social support from parents.

Parental support and healthy parent-child relationships lead to child resilience. Ko (2014) reports that parental support is important to an adolescent's mental health because it forms psycho-emotional stability, and resilience, because the child has grown self-esteem and strengthened positivity (Chapman, Denholm, & Wyld, 2008). Also, Woods (1972) reported that children with sufficient support from their mothers show higher academic achievement levels, and Belle and Longfellow (1984, as cited in Oh, 2012) report that children with strong trust relationships with their mothers show higher levels of self-esteem and self-control.

Social support, then, is studied because, according to Lazarus and Folkman (1984), support is an "immediate buffer to stress and its destructive somatic consequences" (Lazarus & Folkman, 1984: 246). Lazarus and Folkman used Gore's (1978) study of 100 men who had lost their jobs when a factory closed down and cited that the "lack of support was associated with more depression" (Lazarus & Folkman, 1984: 249). Lazarus and Folkman also report that people would have better morale, which would lead to less depression, if they believe — perceive — that they will receive social support when needed (Lazarus & Folkman, 1984: 250, 259). Thus, in this study,

perceived parental support is the perception of social support from parents, including attachment and affection.

2. Relationships between variables

1) Academic stress and depression

According to Kim and Choi (2012), academic stress is a main reason for depression among Korean adolescents. Park and Chung (2010) also report academic stress has a positive (+) influence on depression. Much empirical research consistently shows that adolescents' academic stress spawns negative mental health problems such as depression (Kim, Lee, & Chung, 2013b; Kim, 2014; Lim, Kim, & Jeong, 2011; Kim, Kim, & Yim, 2013; Yoon, Cho, & Lee, 2009).

Many studies on the relationship between academic stress and depression show links between depression and the following (Lee & Larson, 2000): psycho-emotional aspects such as anxiety (Kim & Choi, 2012), suicidal impulse (Yang, Won, & Kim, 2013; Park & Chung, 2010), aggressiveness (Park & Chung, 2010), violent tendencies, and anger; or problematic behavior such as maladaptation to school, dropping out, delinquency, violence, addiction to the Internet (Yoon, Cho, & Lee, 2009), and drinking (Yoon, Cho, & Lee, 2009).

Lazarus and Folkman (1984) also emphasize that stress is made by "mismatches" between persons and their "social identities". It forms when social roles "create conflict, are ambiguous, or lead to overload". It is this last

category that academic stress may be placed in. In the end, stress depends on "how these roles are valued" and how "overload" is coped with. In Korea, the role of student brings along with it an "overload" of expectancy. Because, in Korea, education is seen as important in itself and also as a means to the ends of life "success", students are burdened with a load of stress. Academic stress sometimes is overloaded onto students, even leading to suicide, especially after taking college entrance exams.

2) Moderating effects of self-efficacy

Lazarus and Folkman (1984) explain a process by which not expecting to have control leads to depression. When one expects to be unable to exert control, certain deficits lead to depression. Among the many forms of deficit resulting, the last two forms happen when the person views the situation as “hopeless”, and leads to depression (Garber et al., 1980, as cited in Lazarus & Folkman, 1984).

Literature was reviewed on the moderating effect of self-efficacy in the relationship between stressors and outcomes. There was one study on the moderating effect of self-efficacy on the relationship between a stressful situation and emotional exhaustion which showed results opposite of those predicted in this study. In Hopman et al.’s (2018) study, teachers with high self-efficacy levels rose in emotional exhaustion levels as a result of classroom disruptive behaviors, which, however, concurs with general education studies research. Also, another study on the moderating function of self-efficacy and self-esteem on the relationship between peer victimization and academic performance reported that students with higher social self-efficacy experienced less peer victimization and depression, and performed better academically (Raskauskas, Rubiano, Offen, & Wayland, 2015).

Furthermore, researchers found that self-efficacy moderates the relationship between depressive problems concerning people diagnosed with

dementia and caregivers' distress (Nogales-Gonzalez et al., 2015). In other words, caregivers with high self-efficacy levels were less distressed concerning depressive problems, while caregivers with low self-efficacy were more distressed. Xie (2007) researched the moderating effect of self-efficacy on the stressor and strain (i.e. refusals and anxiety) relationship for telephone interviewers. Xie's results show that perceived social self-efficacy buffered the relationship between stressor and strain at the middle of the shift. Yet other researchers found that job-focused self-efficacy beliefs had a moderating effect on the age-absenteeism relationship (which refers to voluntary absence that could have been avoided; Schwoerer & May, 1996). In detail, as one ages, with low self-efficacy, their absenteeism levels increase, but high self-efficacy moderates the originally high absenteeism and lowers the absenteeism even when one is of age.

Malik, Butt, and Choi (2015) found that creative self-efficacy (Bandura, 1997) moderated the motivation of rewards and subsequent creative performance relationship. In other words, only when an employee has high creative self-efficacy does the motivation of a reward cause creative performance. Self-efficacy moderated the effect of job satisfaction on turnover intention in Shin and Kim (2017)'s research on nursery teachers. In other words, when self-efficacy was high, turnover intention was low despite low job satisfaction levels. Kang, Park, and Moon (2015)'s studies proved that self-efficacy also had a moderating effect on the relationship between

emotional intelligence (e.g., self-awareness and social empathy) and team satisfaction. In other words, even if self-awareness and social empathy levels were low, self-efficacy moderated the relationship with team satisfaction so that team satisfaction levels were still high.

3) Moderating effects of parental support

According to Lazarus and Folkman (1984), social support can prevent stress by making harmful experiences seem less looming. It is a buffer for stress. Perceived social support shows how the characteristics of relationship interactions are appraised by the individual in the degree of supportiveness (Sarason, Levine, Bashan, & Sarason, 1983). According to Schaefer et al. (1982), among the three functions of social support, parental support would pertain to "emotional support", which includes "attachment, reassurance, being able to rely on and confide in a person", which leads to the person feeling that others love and care about them. Ultimately, a fundamental assumption is that individuals would adapt more easily if they believe they would receive social support when needed.

Lee (2016) researched the moderator effects of adaptive emotional control strategies among cognitive strategies and optimism in the relationship between multifarious stress and depression for middle school students. She showed that in the relationship between school-related stress and depression, parental support had a moderating effect. According to Oh (2012), for both male and female 2nd-year middle school students, parental support negatively (-) affects depressive feelings. In Kim (2014)'s research on academic high school students, perceived parental empathy (emotional perception, view of acceptance, empathetic emotional response, cold emotional response,

oversensitive emotional response) performed a moderating effect on the negative influence school-related stress had on adolescents' depression levels.

However, there are also studies with mixed results. According to Park (2009), parental support moderated relationships between depression and suicidal ideation for vocational high school students, but not for academic high school students. In Ahn (2008)'s study for 2nd year-middle school students, in the relationship between stress and problematic behavior, parental attachment decreased the latter, performing a moderating effect, in groups with low stress levels, but increased the latter in groups with high stress levels — not having a moderating effect.

Although Kim, Park, and Lee (2013) partially concluded that mother-child conversations help children overcome "psychological difficulties caused by academic stress", their overall conclusion substantially differs from this. Kim, Park, and Lee (2013) report that father and mother-adolescent communication is not a statistically significant moderator between academic stress and adolescents' mental health for middle and high school students living in the Seoul Metropolitan City area. Lee, Choi, and Seo (2000) also report that parent-child communication is not a statistically significant moderator between academic stress and depression for high school students.

The studies on the moderating effect of parental support, including those with mixed results, have been organized in a table, <Table 1>, on the next page.

Study	Sample	Moderating Effect of Parental Support	
Lee (2016)	Middle School Students	Moderated b/n school-related stress and depression	
Kim (2014)	Academic High School Students	(Perceived parental empathy) Moderated b/n school-related stress and depression	
Park (2009)	Vocational High School Students	Moderated b/n depression and suicidal ideation	
	Academic High School Students	Did not moderate b/n depression and suicidal ideation	
Ahn (2008)	Low Level Stress Group (2^{nd} year Middle School)	Moderated b/n stress and problematic behavior	
	High Level Stress Group (2^{nd} year Middle School)	Did not moderate effect b/n stress and problematic behavior	
Kim, Park, & Lee (2013)	Middle and High School Students Living in Seoul	Mother-child positive conversation	Moderated b/n mental, emotional hardships and academic stress
		Father- and mother-adolescent communication	Did not moderate b/n adolescents' mental health and academic stress

<Table 1>

Studies regarding the Moderating Effect of Parental Support

3. Control variables for depression

In existing studies on variables influencing and being influenced by academic stress and depression, the most prominent have shown to be: gender, self-concept (self-esteem, self-identity, and career identity), and parental monitoring. Hence, these factors were chosen as control variables. The effect each control variable has on the relationship between academic stress and depression are as follows.

First, concerning gender: according to Shin, Jeong, and Kim's (2012) study on gender differences concerning adolescent depression and anxiety, the greatest gender differences during the 3rd year of middle school for Korean adolescents are in "negative emotions" and "non-efficiency". Also, according to Kang (2013), gender has a significant relationship with depression and anxiety. The researcher reported that female adolescents have higher depression and anxiety levels than male adolescents.

Concerning self-concept: In the KCYPS, self-concept was chosen as the four questions, other than those concerned with self-efficacy, that are included in the eight self-concept questions. In detail, they are: "I have clear life goals"; "I think it is best to follow the crowd"; "Before waiting for someone to come up with a good idea, I use my own mind to take action"; "I acknowledge others' opinions well/frequently, and am influenced much by other people's words and actions". As these are wholly different from the self-

efficacy questions (please see V. Methodology, 2. Measurement, 3) Moderator Variable 1: Perceived Self-efficacy), and they measure self-concept, they were chosen as control variables.

Further, Kang (2013) reported that the more negative self-concept is, the greater depression and anxiety levels are. Also, according to Kim and Kim (2006), gender (a sociodemographic factor), self-esteem, and self-identity (self-related factors) made significant differences in levels of depression. In other words, the researcher reported that when self-esteem is low and self-identity is low, adolescents' depression levels increase.

Concerning parental monitoring and self-esteem: according to Kang, Nho, Jeon, and Chung (2012), self-esteem and parental monitoring moderate and alleviate the negative influence of traumatic event experiences.

Concerning career identity, however, although there is not clear direction in which strong career identity affects depression (Oh & Lee, 2013), it is clear there is an association between the two variables, with depression clearly negatively influencing career identity (Oh & Kang, 2018).

Referentially, self-esteem, self-identity, and career identity are all subordinate scales of self-perception. The differences, however, are as follows. First, self-esteem measures self-respect on an individual level. It is a "scale to measure the degree of an individual's self-respect and condition of self-acceptance". It was structured by adapting, into Korean, Rosenberg's (1965) self-esteem scale (cited in the Korea University-affiliated Behavior Science Research Institution, 2000). Second, self-identity measures self-

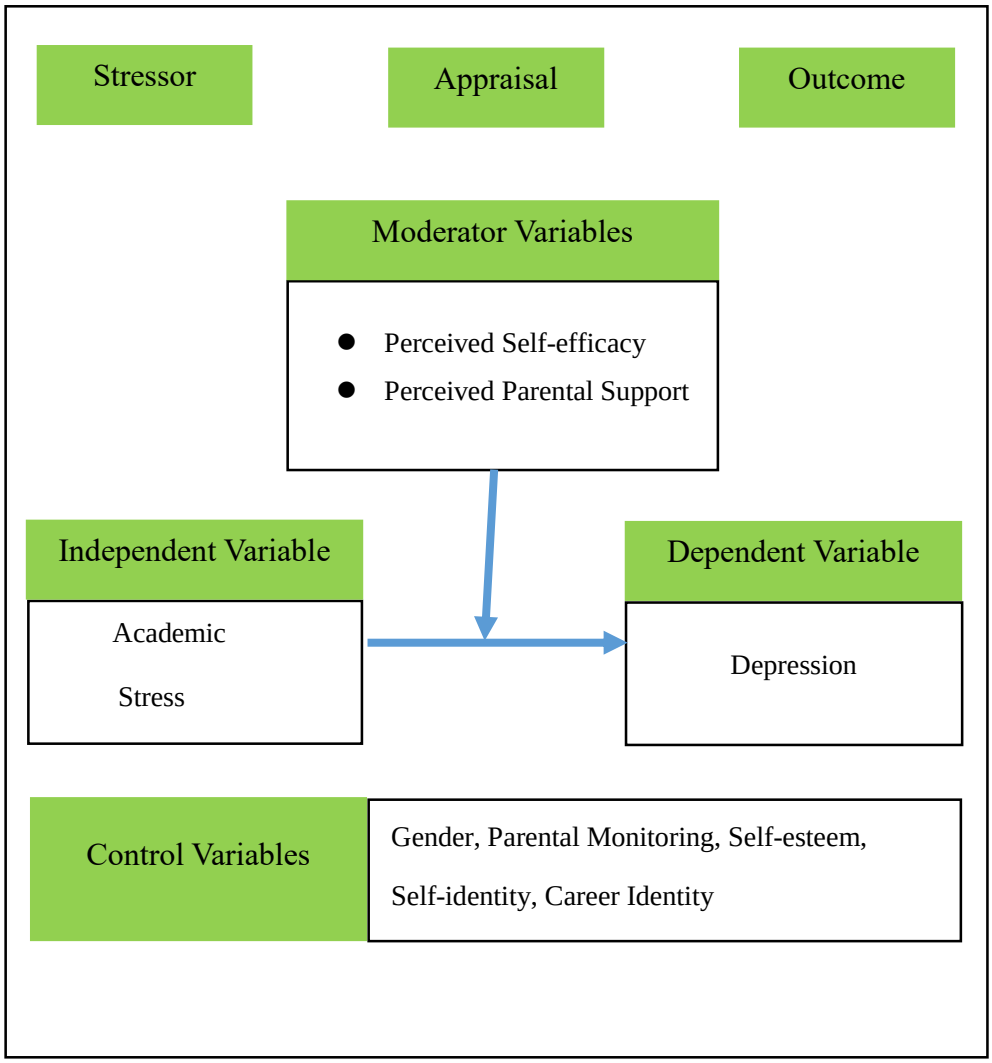
enhancement and psychological well-being on an environmental level. Song and Park's (2009) study examined adolescent self-identity in the backdrop of the variables of the adolescent's family's economic environment, the adolescent's family's psychological environment, and the adolescent's school environment. This study also examined the mediating psychological characteristics of self-enhancement and psychological well-being; it examined what structural relationship and influence these last two variables have. The self-identity scale was structured by revising and supplementing Song's (2008) scale into eight items. Third, career identity is self-confidence in one's career decision-making, and its factors are career stability, goal oriented-ness, uniqueness, self-assertiveness, and consciousness of self-existence. The career identity scale was a revision and supplementation of Kong's (2008) scale into eight items. For reference, consciousness of self-existence differs from self-esteem because it measures the degree to which one is aware of one's existence—more broadly than self-esteem.

IV. Research Model and Hypotheses

1. Research Model

The research model was founded upon Lazarus and Folkman's (1984) transactional model of stress and coping, or their cognitive theory of stress, appraisal, and coping; and upon previous studies on the relationship between academic stress and depression, and the moderating effects of self-efficacy and parental support. The "taxing" "overload" (Lazarus & Folkman, 1984:141) situation — in other words, the stressor — was chosen as academic stress. Depression was chosen to be the morale type (which in this case is negative). Here, firstly, according to Lazarus and Folkman (1984), perceived self-efficacy is an important buffer because the way one perceives their own ability to control a stressful situation affects the outcomes. Therefore, perceived self-efficacy was chosen as the first moderator. Secondly, perceived social and hence parental support (for adolescents) is an important buffer for stressful situations, according to Lazarus and Folkman (1984). This is why perceived parental support was chosen as the second moderator. Thirdly, the researcher of this study chose control variables based on the fact that they affect the relationship between academic stress and depression. The control variables are gender, parental monitoring, self-esteem, self-identity,

and career identity. Therefore, this study examined the moderating roles of perceived self-efficacy and parental support in the relationship between academic stress and depression, for Korean 3rd year-middle school students.



<Figure 1> Research Model

2. Research Hypotheses

For the aforementioned research goals, the following research questions were decided upon.

- Research Question 1: What is the relationship between academic stress and depression, for Korean 3rd-year middle school students?

[Hypothesis 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd-year middle school students.

- Research Question 2: Do perceived self-efficacy and parental support, moderate the relationship between academic stress and depression, for Korean 3rd-year middle school students?

  [Hypothesis 2]: Perceived self-efficacy will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived self-efficacy levels.

  [Hypothesis 3]: Perceived parental support will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived parental support levels.

V. Methodology

The purpose of this study was to research the associations between academic stress, perceived self-efficacy, perceived parental support, and depression among 3rd-year middle school students in Korea. Theoretical framework for this study was provided in Lazarus and Folkman's (1984) transactional model of stress and coping. Included in this chapter are the research subjects and research data, measurement, human subjects' protection, and data analysis method.

1. Research Subjects and Research Data

This study used data from the National Youth Policy Institute (NYPI)'s Korean Children and Youth Panel Survey (KCYPS) collected in 2015. The reason cross-sectional data was used is that according to the longitudinal data accumulated concerning years of adolescence in South Korea, the "3rd year of middle school" is the highest in parental stress, self-efficacy, and depression. In detail, Korean adolescent depression significantly influences time passage. In other words, depression is correlated with the factor of teacher-student relationship: in the transition from the 2nd to 3rd year of middle school, and from the 3rd year of middle school to the 1st year of high school, past teacher-student relationships significantly affect future depression. Also, in both transitions, past depression significantly affects future teacher-student relationships (Bae, 2017). Further, the 3rd year of middle school is the year adolescents must choose which type of high school they would like to venture into, causing career-related stress (Sim & Kim, 2014). Hence, this is a crucial and critical year in an adolescent's life, and, if a school were to implement intervention programs combatting academic stress and depression, the 3rd year of middle school would be the most opportune time to do so. Also, in order to discuss the moderating effects of self-efficacy and parental support, a cross-sectional study would be clearest.

The KCYPS was implemented every year from 2010 to 2016. This

study uses the original 4th-year elementary school student cohort in their 6th year of the survey, 2015, when the subjects were in their 3rd year of middle school. The 2015 data was collected from October 2015 to December 2015. Stratified multi-stage cluster sampling was used. The population was all students in their 4th year of elementary school, nationwide, as at April 2010. The PPS (Probability Proportional to Size) sampling method was applied. The end result was that, for 4th-year elementary school students in 2010, 2,378 students (cases) were selected hailing from 95 classes (one class per school; hence 95 schools).

In 2015, the 6th year of KCYPS, 2,061 students among the 4th grade-elementary school students in 2010, who were studied throughout the seven years, were surveyed. This was an original sample retention rate of 86.7%.

2. Measurement

1) Dependent Variable: Depression

Depression was measured to be recession of interest in life, lack of motivation, loss of activeness, despair, and thoughts about suicide. It connects to low feelings and emotions (KSCL; Kim, Kim, & Won, 1984).

Depression was measured with the Korean Symptom Check List's (KSCL; Kim, Kim, & Won, 1984) depression scale of 13 questions. Three questions among these were excluded and the rest were modified and used for the KCYPS.

In the KCYPS, questions on depression were under question number 13, in the section 'individual development-social emotional development-emotional issues-depression'. The researcher of this study used all ten depression-related questions for this study. They were as follows: "I do not feel energetic", "I feel I am unhappy, sad, and depressed", "I have many worries", "I wish I could die", "I cry often", "When something goes wrong I feel often that it is my fault", "I am lonely", "Nothing interests me", "I feel my future is not bright", and "Everything is difficult". Answers to all ten questions are on a 4-item Likert scale of "very much so" (1), "somewhat so" (2), "somewhat not" (3), and "never" (4). Higher scores calculated for answers refer to higher levels of depression. The Cronbach's α was .893 for the ten questions on depression.

2) Independent Variable: Academic Stress

Academic stress was measured to be the degree to which an adolescent is interested in academics, the degree to which subjects complete tasks, the degree to which subjects understand academic activities, one's ability to study by oneself, and one's attitude toward academics (Jeong, 2009). In the KCYPS, stress was assessed by five questions under the KCYPS sections "developmental environment-educational environment-school adaptation-studies", formally question number 28. The questions were originally taken from Yang (2000)'s 84 questions construing self-regulatory studying ability measurement instruments —Hahn and Kim (2006), through factorial analysis, reconstructed, modified, and supplemented these questions, putting a focus on motivational regulation and action regulation, deeply related to fundamental attitudes toward studying.

Questions asked students how they felt about studying. The questions included "School class time is fun", "I always do my homework", "I understand what I learned in class well", "When I have something I do not understand I ask about it to others (my parents, teachers, or friends)", and "I do not pay attention when I am studying". Answers to these questions are on a 4-item Likert scale of "very much so" (1), "somewhat so" (2), "somewhat not" (3), and "never" (4).

The last question, "I do not pay attention when I am studying", was inversely coded in this research. The rest of the questions used the Likert scale

as it was, and response values for the five questions were calculated. The higher the score is, the more adapted the student is to studying, and is therefore less stressed out about academic activities. The Cronbach's α was .789 for the five questions on academic stress.

3) Moderator Variable 1: Perceived self-efficacy

The test of face validity can be argued to be an appropriate reflection of validity (Gaber, 2010). This is because face validity asks the question of whether research findings make sense. In other words, this validity test is based on common sense. It "fills a gap in internal validity tests" (Gaber, 2010: 472). Also, face validity can be argued to be a stand-alone test. Contrasting with content validity—which focuses on the "*fit* of the defined content of variables…"—face validity focuses on the "commonsense *appearance* of validity" in the research results. While one may have "content validity (fit)", they may not have "face validity (appearance)" (Gaber, 2010: 472). Therefore, under the rule of law of common sense and appearance of the internal validity test of face validity, the researcher of this study compared and found an overlap between the two scales on self-identity/self-efficacy of Song (2009) and Sherer, Maddox, Mercamdante, Prentice-Dunn, Jacobs, and Rogers (1982).

Perceived self-efficacy can be defined in two dimensions: general self-efficacy and social self-efficacy. The first concerns how independent and self-sufficient one is in completing tasks, and the second concerns how well one adapts to situations with new or a lot of people (Sherer et al., 1982).

Perceived self-efficacy was measured with Song's (2009) scale, which was modified and supplemented by the NYPI for the KCYPS into 8 questions. These questions were under question number 14, which was under

the section “individual development-social emotional development-self-perception-self-identity”. Question 14 read, “These questions concern how you as a student think about yourself. Please respond to each question that applies to you.” The researcher of this study chose, among the eight questions, a total of four questions overlapping with Sherer et al.’s (1982) general efficacy and social efficacy items.

In detail, the item “I cannot concentrate on one task” overlaps with Sherer et al.’s (1982) “2. One of my problems is that I cannot get down to work when I should,” “14. I feel insecure about my ability to do things,” and “17. I do not seem capable of dealing with most problems that come up in life.” The first question, “I cannot concentrate consistently on one task”, was inversely coded in this research.

Also, the item “I perform to the end tasks I have planned” in the KCYPS overlaps with Sherer et al.’s (1982) “1. When I make plans, I am certain I can make them work,” “3. If I can’t do a job the first time, I keep trying until I can,” “4. When I set important goals for myself, I rarely achieve them,” “5. I give up on things before completing them,” “8. When I have something unpleasant to do, I stick to it until I finish it,” “10. When trying to learn something new, I soon give up if I am not initially successful,” “11. When unexpected problems occur, I don’t handle them well,” “15. I am a self-reliant person,” and “16. I give up easily.” Answers to the above two questions are on a 4-item Likert scale of “very much so” (1), “somewhat so” (2), “somewhat not” (3), and “never” (4).

The item in the KCYPS “I do not like meeting new people” overlaps with Sherer et al.’s “18. It is difficult for me to make new friends,” “19. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me,” “21. When I’m trying to become friends with someone who seems uninterested at first, I don’t give up easily,” and “23. I have acquired my friends through my personal abilities at making friends.”

The item in the KCYPS “I feel uncomfortable when I am with many people” overlaps with Sherer et al.’s “22. I do not handle myself well in social gatherings.” Both questions, “I do not like meeting new people”, and “I feel uncomfortable when I am with a lot of people”, were inversely coded in this research.

Answers to these questions are on a 4-item Likert scale of “very much so” (1), “somewhat so” (2), “somewhat not” (3), and “never” (4). Higher scores calculated for answers refer to higher levels of self-efficacy. The Cronbach’s α was .605 for the four questions on self-efficacy.

4) Moderator Variable 2: Parental Support

Perceived parental support was defined as parental affection — the linguistic and non-linguistic closeness between parents and children. In other words, it shows the degree to which parents respect, accept, and are sensitive to the needs of children. For example, if parents compliment children well, hug them, respect their opinions, warmly comfort them when they are in difficult situations, and try to spend much time with their children, parents are high in parental affection (Huh, 2000).

Perceived parental support was measured by using the parental child-rearing attitude test scale (with a total of 43 questions) constructed by Huh (2000). Questions in the original scale, which alluded to mothers and fathers separately, were modified to refer to parents as a singular unit. Also, the NYPI excluded repetitive questions for the KCYPS. These questions were under question number 23, which was under the section "developmental environment-family environment-child-rearing method (I)". The researcher of this study chose, among the 21 questions, questions relating to parental affection, and hence, support. Tsai et al. (2018) cites Armsden and Greenberg's (1987) scale on parent-child "attachment" and terms it "parental support". This may be because parental attachment is a subordinate factor of parental support (Seo, 2009).

The following items from Armsden and Greenberg's (1987) scale, concerning adolescents' perceived parental support, overlap with the items on

Huh's (2000) scale on attachment, used in the KCYPS. The items on the KCYPS were as follows: "[My parents] express that they like me", "[My parents] give me courage when I am having difficulties", "[My parents] compliment me often", and "[My parents] respect my opinions". Armsden and Greenberg's (1987) scale (Section I) included the following items. "1. My parents respect my feelings," "4. My parents accept me as I am," "5. I have to rely on myself when I have a problem to solve," "6. I like to get my parents' point of view on things I'm concerned about," "7. I feel it's no use letting my feelings show," "8. My parents sense when I'm upset about something," "9. Talking over my problems with my parents makes me feel ashamed or foolish," "13. When we discuss things, my parents consider my point of view," "14. My parents trust my judgment," "15. My parents have their own problems, so I don't bother them with mine," "17. I tell my parents about my problems and troubles," "19. I don't get much attention at home," "20. My parents encourage me to talk about my difficulties," "21. My parents understand me," "22. I don't know whom I can depend on these days," "23. When I am angry about something, my parents try to be understanding," "25. My parents don't understand what I'm going through these days," "26. I can count on my parents when I need to get something off my chest," "27. I feel that no one understands me," and "28. If my parents know something is bothering me, they ask me about it." Therefore, because KCYPS's questions and Armsden and Greenberg's (1987) scale overlap, and parental attachment is a subordinate factor of parental support, the researcher of this study

connected the two concepts.

Answers to these questions are on a 4-item Likert scale of "very much so" (1), "somewhat so" (2), "somewhat not" (3), and "never" (4). Higher scores calculated for answers refer to higher levels of parental support. The Cronbach's α was .831 for the four questions on parental support.

5) Control variables for depression

Park et al. (2010) argued that control variables should be treated with the same importance as independent and dependent variables. In existing studies on variables influencing and being influenced by academic stress and depression, the most prominent have shown to be gender, self-concept (self-esteem, self-identity, and career identity), and parental monitoring. Hence, these factors were chosen as control variables and were coded as follows.

○ Gender: Male students were coded as dummy variables as 0, and females as 1.

○ Parental monitoring: If they perceived parental monitoring as very strong it was coded as 4, strong as 3, weak as 2, and very weak as 1. It was treated as a continuous variable.

○ Self-esteem: If they had self-concept in the form of self-esteem very strongly it was coded as 4, strongly as 3, weak as 2, and very weak as 1. It was treated as a continuous variable.

○ Self-identity: If they had self-concept in the form of self-identity very strongly it was coded as 4, strongly as 3, weak as 2, and very weak as 1. It was treated as a continuous variable. (One point to note is that Self-identity is distinguished from Self-efficacy, in that Self-identity excludes all questions that were used in this study's self-efficacy scale.)

○ Career identity: If they had self-concept in the form of career identity very

strongly it was coded as 4, strongly as 3, weak as 2, and very weak as 1. It was treated as a continuous variable.

3. Protection of Human Subjects

The researcher of this study underwent examination for exemption for approval of protection of human subjects for this study from the Seoul National University Institutional Review Board. This study obtained exemption for approval of protection of human subjects.

4. Data Analysis

The Korean Children and Youth Panel Study (KCYPS, 6th wave, surveyed in 2015) data was analyzed according to study objectives. SPSS 20.0 was used to analyze data. The data analysis methods for the research questions and hypotheses are as follows.

First, descriptive analysis was used to examine the study subjects' general characteristics and condition of the main variables. This included means and standard deviations, and frequency analyses.

Next, the following analysis methods were used to study the moderating effects of self-efficacy and parental support on the relationship between academic stress and depression:

To begin with, Pearson's correlation analysis was conducted to examine the correlation between self-efficacy, parental support, academic stress, and depression.

Before analysis, mean centering (as in due to the possibility that there might exist the problem of multicollinearity in the interaction term of [the independent variable] X [the moderating effect]) was not conducted. This follows Jose's (2013) advice and research, reporting that centering does not have any effect on the real figure of moderation results. Jose (2013) performed analyses in moderation including and excluding mean centering

and found that both studies showed identical patterns. Hence, he advises that centering is not necessary and does not recommend it unless one hopes to make a shape where the means of the independent variable and the moderation variable are zero.

For the first analysis, regression analysis was conducted to see the relationship between academic stress and depression. This included control variables, and excluded moderator variables and interaction terms.

Next, to examine the moderating effect, Hierarchical Regression Analysis was conducted. The effect that the independent variable, moderator variables, and the interaction terms (independent variable X moderator variables) have on the dependent variables, respectively, were analyzed. Here, $\triangle R^2$, statistical significance, and whether the interaction term has a significant effect on the dependent variable, were tested.

After examining the interaction effects of each moderating effect, this was shown in a graph. This was done by creating a dichotomous categorical variable for self-efficacy (i.e. low self-efficacy and high self-efficacy), and using ModGraph (Jose, 2013) to calculate and produce the figure necessary.

VI. Results

This chapter introduces the characteristics and descriptive statistics of this study's subjects. Further, based on the aforementioned research model, this chapter provides the results of analyzing both the influence of South Korean adolescents' academic stress on their depression levels, and the moderating effects of perceived self-efficacy and parental support on the relationship between academic stress and depression.

1. Sample Characteristics

As analysis subjects, this study uses a sample of adolescents who were, at the time, in their 3rd year of middle school, who responded to the NYPI's 6th wave of surveys, taken in 2015, as part of the KCYPS. First, the number of cases included in this study's final analysis subjects was 2,061 cases of adolescents in their 3rd year of middle school. The researcher of this study focused on the dependent variable, independent variable, moderator variables, and control variables when analyzing the characteristics of these subjects. The results of this analysis are <Table 2>, which excludes missing values.

Concerning the main variables, over 90 percent of study subjects replied that they are not depressed. For the independent variable, academic stress, almost 80 percent replied that they are not stressed due to academics. For the moderating variables, first, 75.4 percent replied that they are high in self-efficacy. For parental support, 90.5 percent replied that they have high parental support.

For the control variables, firstly, 52.9 percent was male and 47.1 percent female. Secondly, over 90 percent responded they are monitored by parents strongly. Over 90 percent also replied they are high in self-esteem. For self-identity, 77.7 percent replied they are strong in this item. For career identity, 75.7 percent replied they are strong in this item.

Comprehensively, a balanced dispersion of male and female adolescents in their 3rd year of middle school in South Korea are mostly not depressed and not stressed, and over three-fourths are high in perceived self-efficacy and parental support. Most are monitored strongly by parents and are also high in self-esteem. Over three-fourths are strong in self-identity and career identity.

Type	Variable	Category	Frequency	Percentage
Dependent Variable	Depression	1=very much not so	662	32.1
		2=not so	1202	58.3
		3=so	182	8.9
		4=very much so	15	.7
Independent Variable	Academic Stress	1=very much not so	256	12.4
		2=not so	1338	65.1
		3=so	444	21.5
		4=very much so	20	1.0
Moderator Variables	Perceived Self-efficacy	1=very much not so	13	.6
		2=not so	494	24.0
		3=so	1307	63.4
		4=very much so	247	12.0
	Perceived Parental Support	1=very much not so	8	.4
		2=not so	188	9.1
		3=so	1242	60.3
		4=very much so	623	30.2

Control Variables	Gender	Male	1091	52.9
		Female	970	47.1
	Parental Monitoring	1=very much not so	19	.9
		2=not so	154	7.5
		3=so	1167	56.6
		4=very much so	721	35.0
	Self-esteem	1=very much not so	5	.2
		2=not so	196	9.6
		3=so	1501	72.8
		4=very much so	359	17.4
	Self-identity	1=very much not so	2	.1
		2=not so	458	22.2
		3=so	1406	68.2
		4=very much so	195	9.5
	Career Identity	1=very much not so	11	.5
		2=not so	490	23.8
		3=so	1110	53.9
		4=very much so	450	21.8

<Table 2> Sample Characteristics (excluding missing values)

2. Descriptive Statistics

In order to examine the distribution of the variables in this study's regression model, and ensure the basic hypotheses of regression analysis, of homoskedasticity and normality— the researcher of this study checked central tendencies and variances, and the results are shown in <Table 3>. First, to understand the distribution of the variables and homoskedasticity, the researcher of this study checked the skewness and kurtosis. The skewness and kurtosis of all variables were under the absolute value of 2, showing the sample for this study follows normality.

Type	Variable	N	Min	Max	Mean (SD)		Skewness (SE)		Kurtosis (SE)	
Dependent	Depression	2061	1	4	1.78	.550	.491	.054	.259	.108
Independent	Academic Stress	2058	1	4	2.13	.537	.079	.054	.479	.108
Moderator	Perceived Self-efficacy	2061	1	4	2.73	.532	.145	.054	.109	.108
	Perceived Parental Support	2061	1	4	3.12	.564	-.317	.054	.201	.108
Control	Gender	2061	.00	1.00	.4706	.49926	.118	.054	-1.988	.108
	Parental Monitoring	2061	1	4	3.22	.576	-.589	.054	.782	.108
	Self-esteem	2061	1	4	2.99	.452	-.153	.054	.270	.108
	Self-identity	2061	1	4	2.72	.483	.377	.054	.210	.108
	Career Identity	2061	1	4	2.91	.608	.075	.054	-.523	.108

<Table 3> Descriptive Statistics

3. Correlation between Variables

Before testing this study's hypotheses, the simple correlation between the variables included in the analysis model must first be understood, and existence of multicollinearity between variables must be evaluated. First, Pearson's simple correlation analysis was conducted to test the simple correlation, and Variance Inflation Factor (VIF) values were checked to see whether multicollinearity existed. <Table 4> shows the simple correlation analysis, and <Table 5> and <Table 6> show VIF values.

The following is the correlation analysis for the main variables and sociodemographic variables of this study's subjects. First, concerning the correlation between academic stress, the independent variable, and depression, the dependent variable, the correlation coefficient is 0.330 and is statistically significant at a $p < 0.01$ level. This points to the fact that academic stress and depression are positively correlated, and that when academic stress levels rise, depression levels rise also.

Second, the correlation coefficient between academic stress and perceived self-efficacy was -0.421 and statistically significant at a $p < 0.01$ level. This shows that academic stress and self-efficacy are negatively correlated, and adolescents with high self-efficacy have lower academic stress levels, while adolescents with low self-efficacy have higher academic stress levels.

Third, the correlation coefficient between academic stress and perceived parental support was -0.423 and statistically significant at a $p < 0.01$ level. This shows that academic stress and parental support are negatively correlated, and adolescents with high parental support have lower academic stress levels, while adolescents with low parental support have higher academic stress levels.

Fourth, the correlation coefficient between perceived self-efficacy and the dependent variable, depression, was -0.483 and was statistically significant at a $p < 0.01$ level. This shows a negative correlation between self-efficacy and depression and shows that adolescents with higher self-efficacy would have lower levels of depression.

Fifth, the correlation coefficient between perceived parental support and depression was -0.338 and was statistically significant at a $p < 0.01$ level. These results show a negative correlation between parental support and depression and show that adolescents with higher parental support would have lower levels of depression.

Sixth, when checking the correlation between the control variables and the dependent variable, depression, all control variables share a statistically significant correlation with the dependent variable, depression, at a $p < 0.01$ level. Female adolescents tend to be more depressed than male adolescents, because gender shares a statistically significant positive correlation (correlation coefficient = 0.147) with depression. Parental

monitoring shares a statistically significant negative correlation (correlation coefficient = -0.248) with depression, showing that stronger parental monitoring correlates with lower depression levels. Self-esteem shares a statistically significant negative correlation (correlation coefficient = -0.651) with depression, showing that stronger self-esteem associates with lower depression levels. Self-identity shares a statistically significant negative correlation (correlation coefficient = -0.383) with depression, showing that stronger self-identity correlates with lower depression levels. Career identity shares a statistically significant negative correlation (correlation coefficient = -0.231) with depression, showing that stronger career identity associates with lower depression levels.

	1	2	3	4	5	6	7	8	9
1. Gender	—								
2. Parental Monitor-ing	.081**	—							
3. Self-esteem	-.039	.330**	—						
4. Self-identity	-.017	.284**	.517**	—					
5. Career Identity	-.012	.306**	.335**	.516**	—				
6. Academic Stress	-.033	-.423**	-.422**	-.415**	-.317**	—			
7. Perceived Self-efficacy	-.041	.235**	.521**	.534**	.278**	-.421**	—		
8. Perceived Parental Support	.040	.554**	.422**	.307**	.303**	-.423**	.285**	—	
9. Depress-ion	.147**	-.248**	-.651**	-.383**	-.231**	.330**	-.483**	-.338**	—

** $p < 0.01$ (two-tailed)

<Table 4> Pearson's Correlation between Variables

4. Testing the Hypotheses

In this section the researcher of this study used regression analysis to test this study's hypotheses, while controlling for adolescents' sociodemographic variables that affect depression. This study's hypotheses can be largely divided into two parts: the section without moderating variables and effects, and the section with moderating variables and effects. In order to examine the latter, the researcher of this study performed hierarchical regression analysis, using the interaction terms of the variables. The analysis was performed in two steps with two models total, and all steps used controlled variables.

In the first step, Model 1 examined the relationship between academic stress and depression, only, while controlling for sociodemographic variables. In the second step, Model 2 examined whether the relationship between academic stress and depression changes, or, is moderated, by the effects of perceived self-efficacy, and perceived parental support, respectively. In order to examine this, the researcher of this study added the moderating variables of perceived self-efficacy and parental support, and also the interaction terms of "academic stress times perceived self-efficacy" and "academic stress times perceived parental support" to Model 1, resulting in Model 2. In order to examine the moderating effect, the R-square change amount and interaction term's statistical significance had to be checked in each step that the

interaction terms were inserted. The regression equations for each step are as follows.

<Regression Equations>

Model 1.

$$Y = a + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + b_6X + e$$

Model 2.

$$Y = a + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + b_6X + b_7M_1 + b_8M_2 + b_9XM_1 + b_{10}XM_2 + e$$

Y = Depression level

X = Academic Stress

M_1 = Perceived Self-efficacy

M_2 = Perceived Parental Support

C_1 = Gender

C_2 = Parental Monitoring

C_3 = Self-esteem

C_4 = Self-identity

C_5 = Career Identity

1) The Main Effect of the Independent Variable (Academic Stress) on the Dependent Variable (Depression)

This section aims to test Research question 1 and Hypothesis 1, which are as follows.

Research Question 1: What is the relationship between academic stress and depression, for Korean 3rd-year middle school students?

[Hypothesis 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd year middle school students.

In order to test the above hypothesis, the researcher of this study controlled the sociodemographic variables related to depression, and then inserted the independent variable, academic stress, and conducted regression analysis, concerning the dependent variable, depression. The results are shown in Model 1 in <Table 5>. When exploring the regression coefficient of the independent variable, the influences of academic stress is .056 and is statistically significant at a $p < 0.01$ level. This means that higher academic stress levels lead is associated with higher depression levels, and lower academic stress levels is associated with lower depression levels.

Among the control variables that influence depression, gender's Beta coefficient value is .129 and statistically significant at the $p < 0.001$ level. Also, self-esteem's Beta coefficient value is -.590 and is statistically

significant at the $p < 0.001$ level. Further, self-identity's Beta coefficient value is -.057 and is statistically significant at the $p < 0.01$ level. Therefore, gender (dummy coded male = 0, female = 1), self-esteem, and self-identity significantly influence adolescent depression.

In the end, Hypothesis 1 was not rejected, so that the result is as follows.

[Result 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd-year middle school students.

		Model 1			
		B	S.E.	β	VIF
Independent Variable	Academic Stress	.058	.020	.056**	1.445
Control Variables	Gender	.141	.018	.129***	1.013
	Parental Monitoring	-.030	.018	-.032	1.305
	Self-esteem	-.717	.025	-.590***	1.509
	Self-identity	-.064	.025	-.057**	1.725
	Career Identity	.023	.018	.025	1.424
Constant		3.935			
R-square		.445			
Adjusted R-square		.443			
R-square change		.002			
F		273.688***			

** p < 0.01, *** p < 0.001 (two-tailed)

<Table 5> Regression Analysis of Main Effect

2) The Moderating Effect of the Moderating Variables (Perceived Self-efficacy and Parental Support) on the relationship between the Independent Variable (Academic Stress) and the Dependent Variable (Depression)

This section aims to test Research question 2 and Hypotheses 2 and 3, which are as follows.

> Research Question 2: Do perceived self-efficacy and parental support, moderate the relationship between academic stress and depression, for Korean 3rd-year middle school students?
>
> [Hypothesis 2]: Perceived self-efficacy will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived self-efficacy levels.
>
> [Hypothesis 3]: Perceived parental support will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived parental support levels.

To test the above hypotheses, regression analysis was conducted by first controlling the sociodemographic variables relating to depression, and then by inserting into Model 1 the moderating variables perceived self-efficacy and parental support. Then, the researcher of this study inserted the interaction terms of the independent variable (academic stress) and self-

efficacy and parental support, respectively. The results are shown in <Table 6>. <Table 6>'s Model 2 tested whether the variables themselves and the moderating effects of perceived self-efficacy and parental support affect the relationship between academic stress and depression.

In order to do this, the sociodemographic variables relating to depression that were controlled and inserted were, in the following order: academic stress, perceived self-efficacy, perceived parental support, academic stress * perceived self-efficacy, academic stress * perceived parental support.

In the Model Fit for Model 2, the F value was 183.535 and showed that the approximated regression equation was statistically significant at the $p < 0.001$ level. The explanatory power of the model, the adjusted R-square value, was .470. This means that the variables included in Model 2 explain about 47.0 percent of the variance of depression, the dependent variable. The R-square change of Model 2 concerning Model 1 was .000.

When taking a look at the regression coefficients of the two interaction terms respectively made by each perceived self-efficacy and perceived parental support, which were inserted to test moderating effects, the following is shown. First, the interaction term's Beta value for academic stress and self-efficacy was -.249 and statistically significant at a $p < 0.01$ level, and the Beta value for the interaction term between academic stress and parental support was .055 and was not statistically significant. To interpret

this, one could say self-efficacy's moderating effect exists in the relationship between academic stress and depression, but the moderating effect of parental support does not exist in the relationship between academic stress and depression. Therefore, the results of Model 2 support Hypothesis 2, but reject Hypothesis 3. Consequently, the study results show that:

> [Result 2]: Perceived self-efficacy moderates the relationship between academic stress and depression such that the impact of academic stress on depression was affected among Korean 3rd-year middle school students with higher perceived self-efficacy levels.
> [Result 3]: Perceived parental support does not moderate the relationship between academic stress and depression such that the impact of academic stress on depression was not affected among Korean 3rd-year middle school students with higher perceived parental support levels.

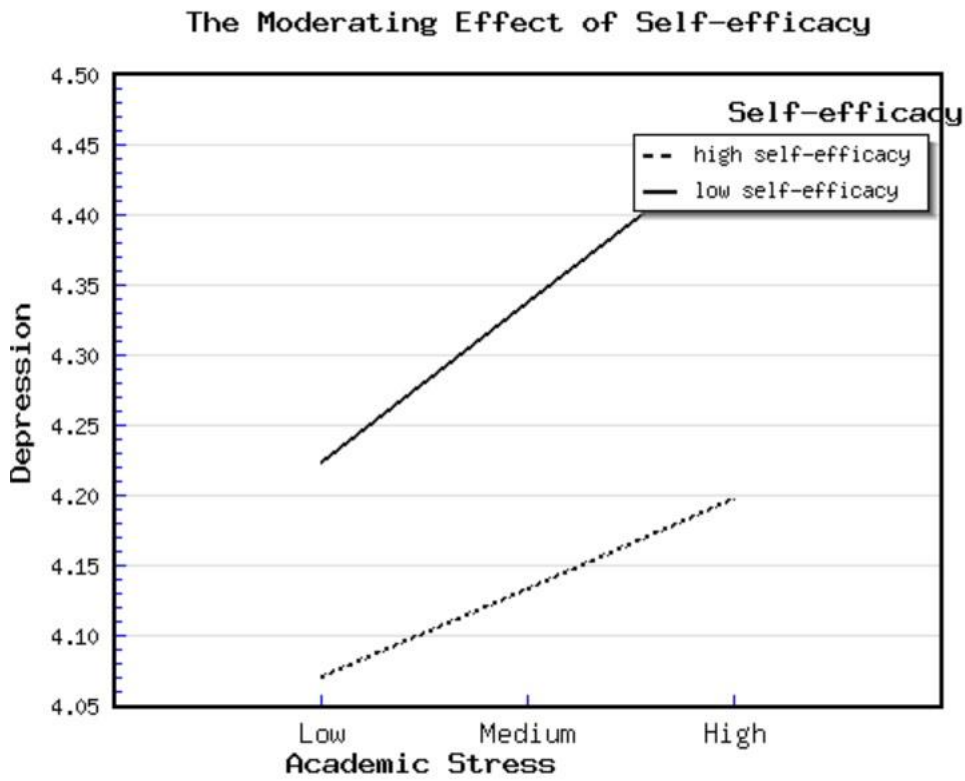
		Model 2			
		B	S.E.	β	VIF
Independent Variables	Academic Stress (A)	.211	.099	.206*	36.259
	Perceived Self-efficacy (B)	-.005	.062	-.004	14.175
	Perceived Parental Support (C)	-.111	.064	-.113	16.724
Moderating Variables	A*B	-.093	.028	-.249**	21.946
	A*C	.018	.028	.055	27.577
Control Variables	Gender	.138	.018	.125***	1.015
	Parental Monitoring	-.010	.019	-.010	1.578
	Self-esteem	-.630	.026	-.518***	1.721
	Self-identity	.001	.025	.001	1.925
	Career Identity	.019	.017	.021	1.442
Constant		3.887			
R-square		.473			
Adjusted R-square		.470			
R-square change		.000			
F		183.535***			

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed)

<Table 6> Regression Analysis of Moderating Effects of Perceived Self-efficacy and Parental Support

According to results from regression analysis of Model 2, perceived self-efficacy has a moderating effect on the relationship between academic stress and depression, but parental support does not. Therefore, the researcher of this study dichotomized self-efficacy into high and low levels of self-efficacy, based on the mean, 2.73—high self-efficacy being a group that is the same or higher than 2.73, and low self-efficacy being a group that is lower than 2.73.

A more intuitive showing of the moderating effect of self-efficacy is shown in <Figure 2>. The graph shows, through regression lines, the effects of academic stress on depression in high and low levels of self-efficacy. Firstly, the slopes of both low and high self-efficacy are both positive, showing that academic stress increases depression in adolescents in both cases. Overall, adolescents with low self-efficacy are associated with higher levels of depression, and adolescents with high self-efficacy are associated with lower levels of depression, both induced from academic stress. More concretely concerning the slope—that is, the degree to which depression levels increase according to academic stress levels—adolescents with lower self-efficacy change depression levels at a greater rate than those with higher self-efficacy; that is, the slopes are steeper in cases of adolescents with lower self-efficacy. In other words, the moderating effect of self-efficacy is strongest in adolescents with higher levels of self-efficacy.



<Figure 2> The Moderating Effect of Self-efficacy

VII. Conclusions

1. Summary

Nepotism causes much of Korean society to emphasize the name of one's alma mater. Adolescents suffer from academic stress due to pressure to enter top universities. This academic stress often leads to depression and other harmful outcomes. Among school years during which adolescents pass through during puberty, the 3rd year of middle school stands out because it is the year studies have found to be highest in depression and parent-related stress, and also in self-efficacy.

For Korean adolescents in their 3rd year of middle school, despite much research conducted on the reasons for and results relating to depression caused by academic stress, little research has been done on factors alleviating this relationship. The researcher of this study draws on Lazarus and Folkman's (1984) transactional model of stress and coping for clues on how to best cope with stressful situations, namely academic stress which is strongly associated with depression.

According to Lazarus and Folkman (1984), perceived self-efficacy and social support are important aspects of the stress-appraisal process. When

one believes they can control the outcomes of their stress, the outcomes, according to Lazarus and Folkman, are often more positive. These researchers also report that social support is a strong buffer for stressful situations, among the outcomes of which depression is highlighted.

Therefore, the researcher of this study would focus on perceived self-efficacy and social support for adolescents, the latter of which in most cases mainly takes the form of parental support. The hypotheses established were as follows.

[Hypothesis 1]: Increase in academic stress is associated with increase in symptoms of depression, for Korean 3rd-year middle school students.

[Hypothesis 2]: Perceived self-efficacy will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived self-efficacy levels.

[Hypothesis 3]: Perceived parental support will moderate the relationship between academic stress and depression such that the impact of academic stress on depression will be affected among Korean 3rd-year middle school students with higher perceived parental support levels.

In order to test the research hypotheses, cross-sectional data from the KCYPS—the 6th wave from the 4th grade elementary school cohorts—was used. In detail, 2,061 adolescents in their 3rd year of middle school were studied. SPSS was used to perform hierarchical regression analysis regarding

the main effects of the independent variable, and then interaction terms were hierarchically inserted to test the moderation effects of perceived self-efficacy and parental support.

The results to the hypotheses tests were as follows. First, this study supported the first hypothesis that academic stress is associated positively with depression. A statistically significant positive relationship was found between the independent variable, academic stress, and the dependent variable, depression. This points to the fact that academic stress has harmful association with depression.

Second, the second hypothesis was supported in that perceived self-efficacy proved to be a significant moderator variable in the relationship between academic stress and depression. In order to test the moderator effect, the interaction term of academic stress and self-efficacy was proven to have a statistically significant regression coefficient, and the R-square change value was 0.000.

Third, the third hypothesis was rejected in that perceived parental support proved to not be statistically significant in moderating the relationship between academic stress and depression. The regression coefficient of the interaction term of academic stress and parental support was not statistically significant.

2. Discussion

The competitive academic system of Korea puts pressure on students to attain high scores on important exams. This causes academic stress, and previous studies have shown that this academic stress most likely leads to depression for Korean adolescents. Therefore, the first focus of this study was to examine the relationship between academic stress and depression, and the second, to examine moderating effects.

First, this study concurs with previous research that have pointed out a statistically significant relationship between academic stress and depression for Korean adolescents, where depression levels increase is associated with increased academic stress levels. This includes research from Kim, Lee, and Chung (2013a); Moon (2008); and Park and Chung (2010).

Further, previous studies, and Lazarus and Folkman's (1984) transactional model of stress and coping, reported that certain factors lead to better coping and hence better outcomes in stressful situations. Among these, researchers have named self-efficacy and parental support.

Perceived self-efficacy was proven by this study to be a significant moderator in the relationship between academic stress and depression. This study's results concur with the meta-analysis of Gong and Kim (2017) in that these two researchers reported that among self-related factors, self-efficacy is a protective factor for adolescent depression.

Recently, according to Lazarus and Folkman (1984), many studies have offered suggestions to create measures of general beliefs about control more specific, to enhance predictability. Literature has specified the concept to the context of intellectual and academic achievement (Crandall, Katkovsky, & Crandall, 1965), meaning concerning academic stress, self-efficacy has been proven to have predictive power.

However, this study shows that parental support is not a significant moderator in the relationship between academic stress and depression. The results of this study did not agree with Lee's (2016) results for middle school students that parental support moderated the relationship between school-related stress and depression. Kim (2014) studied perceived parental empathy for academic high school students and found it moderated the influence school-related stress had on adolescent depression. The results of this study disagreed with these results also. Further, contrary to Tamura's (2018) emphasis on parent-child perceived relationships, parental support did not prove to be a critical factor in child adjustment levels to adversity. This may be due to the control variables used in this study, discussed further in a later part of the conclusions section of this study.

Hence, this study's results also do not come to the same conclusions regarding the importance of parental support, as reported in Moon's (2017) study that showed parental support having the highest frequency as a protective factor for adolescent resilience. On the contrary, parental support

was shown, through the present study, as not statistically significant in the moderating effect it has on the relationship between academic stress and depression.

This study's results disagree with Kim, Park, and Lee's (2013) partial results for middle and high school students living in the Seoul Metropolitan City area that reported that "through positive conversation with mothers, children overcome psychological difficulties caused by academic stress." But perhaps Kim et al. (2013) were referring more to a two-way conversation more than one-way perceived parental support, which is a moderator in this study.

On the other hand, the results partly concur with Lee, Choi, and Seo (2000) in that parent-child communication is not a statistically significant moderator in the relationship between academic stress and depression for high school students. The results of this study also are similar to Kim, Park, and Lee's (2013) overall general results in that father and mother-adolescent communication was not a statistically significant moderator in the relationship between academic stress and the mental health of adolescents.

The results of this study regarding parental support as a moderator variable in the relationship between academic stress and depression concurs with the mixed results mentioned earlier in this study. In detail, the study of Park (2009) had shown that for academic high school students, parental support did not moderate the relationship between depression and suicidal

ideation, although it did moderate the relationship for vocational high school students. Therefore, the current study agrees partly with Park's (2009) results. Also, Ahn (2008) reported that 2nd year middle school students decreased in problematic behavior caused by stress when parental attachment moderated, but only in groups with low stress levels. In actuality, it increased problematic behavior in groups with high stress levels, perhaps alluding to why the present study's results may have proved to not be statistically significant. In a snapshot, parental support was not a significant moderator for students in academic high schools rather than vocational high schools, and not a significant moderator for students in high stress level groups rather than low stress level groups. Therefore, it may be deduced that parental support is not a significant moderator in groups of adolescents within environments with higher stress levels.

Hence, the following are reasons as to why the moderating variables, perceived self-efficacy and parental support, had either statistically significant or statistically not significant coefficients. Concerning the sample, while there was evidence — provided by Lee (2018) — for the 3rd year of middle school being highest in self-efficacy and highest in parental stress, the following points warrant attention.

To begin with, perhaps the 3rd year of middle school being the highest in self-efficacy levels for adolescents made the effect self-efficacy had on the relationship between the independent and dependent variables of

this study even more pronounced. In detail, there is a possibility that the increased self-efficacy level in the 3rd year of middle school, compared to other grades, appeared more clearly in the result of their effect on the relationship between academic stress and depression. Next, the 3rd year of middle school being the highest in parental stress might have hindered the effect parental support had as a moderator of the relationship between academic stress and depression.

On another note, concerning the theoretical framework, this study is couched in Lazarus and Folkman's (1984) transactional model of stress and coping. The theory that persons perceiving themselves to be able to control a stressful situation well (self-efficacy in the appraisal stage of stress-coping) would have substantially different outcomes is supported, in the present study, by self-efficacy being reported as a statistically significant moderator in the relationship between academic stress and depression.

In a word, while perceived social support and hence perceived parental support is an important part of the appraisal process (Lazarus & Folkman, 1984), it is not statistically significant enough to be a moderator in the relationship between academic stress and depression. This does not undermine parental support's role in leading to adolescent resilience and being important in adolescent mental health (Ko, 2014; Chapman, Denholm, & Wyld, 2008).

3. Implications for Theory

This study proved more academic stress causes more depression for Korean adolescents, and that perceived self-efficacy is a statistically significant moderator in the relationship between the two variables. However, perceived parental support showed to not be a statistically significant moderator in the relationship between the two variables. This may be because parental affection is a subordinate factor of parental support, and the two are not identical concepts. It may also be because of the control variables used. According to Brannick (2018), one needs to be careful when making inferences using control variables because "statistical control holds constant things that may be connected in ways not considered by the analysis" (402). Further, there might have even been what York (2018) coins "included variable bias", where "adding control variables can bias coefficient estimates with respect to causal influence on the dependent variable (683).

The differences in literature review and the findings of this study are organized as follows. First, Lazarus and Folkman (1984) had found social support a buffer for stress. Second, Kim (2014) had reported parental empathy moderated school-related stress and depression. Third, Lee (2016) found parental support had moderator effects in the relationship between multifarious stress and depression. In contrast, the present study reports that parental support is not a moderator for the relationship between academic

stress and depression. Although Park and Kim (2016) studied parent-child relationships because they pointed it out as the most fundamental of all relationships, this is not sufficient evidence nor guarantee that it is a most prominent buffer to the relationship between academic stress and depression among adolescents.

All in all, self-efficacy is an important quality to develop in one's adolescent stage of life. It is through the development of self-efficacy that one would learn how to cope with life's stressful situations. This is especially true not only of an adolescent's future, but also for, as an example, adolescents who do not have the financial background to afford private tutoring in Korea's harsh academic competition-filled school scene.

4. Implications for Practice

This study shows that perceived self-efficacy is a significant moderator in the relationship between academic stress and depression. There is therefore a need for practical interventions raising adolescents' perceived self-efficacy levels. Because depression is a widespread problem and well-known result of academic stress in Korea, intervention programs must be conducted, in schools and adolescent-focused social work agencies, to alleviate the effect of the latter on the former. The results of this study provide direction for such intervention programs. In detail, education policies in Korea must include the following preemptive (concerning mental health problems) intervention programs as mandatory, in school curriculum.

Game playing decreases academic stress and increases self-efficacy (Seo & Kim, 2018). Mentoring activities increase self-efficacy of mentors, who are adolescents (Hwang & Kim, 2016). NANTA (stress-relieving, percussion instrument-related) activities increase self-efficacy and relieve stress (Yeom, 2012). Group Literary Therapy Programs decrease depression and increase self-efficacy of adolescents with depressive tendencies (Lee, Cheon, & Park, 2015). Finally, Group Art Therapy decreases depression and increases the self-efficacy of middle school students (Kim, & Kim, 2015).

All this to say, school social workers can play a pivotal role in enhancing perceived self-efficacy levels of adolescents to buffer the

relationship between academic stress and depression. This is because both preemptive (primary) and mediator (tertiary) programs are needed to combat Korean academics-related social pressure. Furthermore, screening and outreach programs are also needed in both schools and community social welfare centers for adolescents experiencing depression, because in many cases it does lead to suicidal ideation.

5. Limitations

This study has the following limitations. First, the moderator variables of self-efficacy and parental support were both not clearly identified in the original data (KCYPS, 4th grade elementary school cohort, 6th wave). According to face validity, items showing self-efficacy and parental support were extracted from the original data. This is because in the KCYPS, the items for self-efficacy and parental support were similar or identical to items for self-efficacy in other (Sherer et al., 1982; Armsden & Greenberg, 1987) studies on scales. However, face validity is controversial in whether it is a strong indicator of validity. Therefore, this study falls short in displaying a strong case concerning internal validity for the variables perceived self-efficacy and parental support. This is because certain items in the KCYPS may or may not wholly overlap with Sherer et al.'s (1982) and Armsden and Greenberg's (1987) scales to measure perceived self-efficacy and parental support, respectively.

Next, due to the fact that this study is cross-sectional, it is limited in examining causal relationships according to the passage of time. Although causal relationships according to the passage of time is not a focus of this study, it would be interesting nevertheless to study the longitudinal moderation effects of perceived self-efficacy on the relationship between

academic stress and depression, with cohorts according to grade or age, for adolescents in middle and high school in Korea.

Next, this study only examined academic stress. However, academic stress is not the only type of stress adolescents experience. Non-academic stress can also lead to depression; adolescents go through many types of relational stress as well. A Youth Cyber Counseling Center case study showed that relationship-related stress is higher in school settings than academics-related stress (Yonhap News, 2012. 2. 29). Therefore, the fact that only one type of stress, academic stress, was measured in this study may prove to be a limitation.

Finally, this study only examined general and social self-efficacy, and not academic self-efficacy or career self-efficacy, or even other types of self-efficacy. The fact that this study did not examine specific types of self-efficacy may be a limitation. For example, academic efficacy or career efficacy may have different impacts on the relationship between academic stress and depression among adolescents.

References

강대웅, 박계홍, & 문재승 (2015). 감성지능이 팀 유효성에 미치는 영향에 있어서 자기효능감의 조절효과. 인적자원개발연구, 18(2), 59-80

강현아 (2013). 청소년의 누적 위험 요인이 우울 및 불안에 미치는 영향. 청소년학연구, 20(9), 175-197.

강현아, 노충래, 전종설, 정익중 (2012). 가정외보호 청소년의 부정적 사건 경험이 우울 및 불안에 미치는 영향과 보호요인의 조절효과. 청소년학연구, 19(3), 193-222.

고려대학교 부설 행동과학연구소 (2001). 심리척도 핸드북 I. 서울: 학지사.

고미숙 (2014). 저소득 가정 청소년의 스트레스가 정신건강에 미치는 영향: 스트레스 대처 적응 모델의 적용. 대구대학교 박사학위논문.

공은화 & 김원영 (2017). 청소년 우울 영향 변인들에 대한 메타분석. 한국웰니스학회지, 12(3). 61-75.

공인규 (2008). Holland 진로탐색 프로그램이 학습부진아의 진로성숙도, 진로효능감, 진로정체감 및 진로장애에 미치는 효과. 부산대학교 박사학위논문.

교육부 보건복지부 질병관리본부 (2017). 제13차(2017년) 청소년건강행태온라인조사 통계.

권석만 (2003). 현대이상심리학. 서울: 학지사.

권세원, 이애현, & 송인한 (2012). 청소년 행복감에 관한 연구. 한국청소년연구, 23(2), 39-72.

권숙희 (1998). 초등학교 아동의 스트레스 요인과 대처 양식의 탐색. 영남대학교 교육대학원 석사학위논문.

권유정 (2012). 청소년의 애착유형, 자기효능감과 정서조절능력의 관계. 한국심리

학회 연차 학술발표논문집, 2012(단일호), 287-287.

김광일, 김재환, & 원호택 (1984). 간이 정신진단검사 실시 요강. 서울: 중앙적성연구소. 참고: 2019년 5월 6일 (https://kin.naver.com/qna/detail.nhn?d1id=11&dirId=1111&docId=61320970&qb=6rCE7J207KCV7Iug7KeE64uo6rKA7IKsIOyLpOyLnOyalOqwlSDquYDqtJHsnbwg7Jqw7Jq4&enc=utf8&section=kin&rank=1&search_sort=0&spq=0)

김도연, 오옥선, & 김성봉 (2012). 고등학생이 지각한 사회적지지와 진로성숙도와의 관계에서 자기효능감의 매개효과. 청소년학연구, 19(5), 71-91.

김동기 & 최윤정 (2012). 청소년의 스트레스 유형이 공격성에 미치는 영향 및 우울의 매개효과에 관한 연구. 청소년학연구, 19(6), 249-268.

김보용 (2009). 초등학생의 사교육 경험이 학업스트레스와 학업성취도에 미치는 영향. 연세대학교 교육대학원 석사학위논문.

김빛나 & 박주희 (2013). 청소년의 학업 스트레스가 우울증상에 미치는 영향과 반응양식의 조절효과. 아동학회지, 34(3), 113-128.

김서현, 김예솔, & 임혜림 (2013). 고등학생의 학업스트레스와 우울 간 관계에서 자기주도성의 조절효과. 청소년학연구, 20(10), 339-368.

김선하 & 김춘경 (2006). 사회인구학적 변인과 자아관련 변인이 청소년 우울에 미치는 영향. 정서•행동장애 연구, 22(3), 325-348.

김영애 & 김갑숙 (2015). 집단미술치료가 중학생의 우울과 자기효능감에 미치는 효과. 인문학논총, 37, 81-115.

김유선, 박미란, & 이지연 (2013). 청소년의 학업스트레스와 정신건강의 관계에서 부,모-자녀간 의사소통의 조절효과. 아동교육, 22(2), 69-85.

김은영, 박인혜, 김윤경, & 이정미 (2015). 청소년의 지각된 스트레스가 우울에 미치는 영향: 낙관성과 정서조절능력의 매개효과를 중심으로. 학습자중심교과교육연구, 15(2), 373-388.

김인자 & 서문자 (1997). 류마티스 관절염 환자의 적응 예측모형—Roy 이론과

Lazarus 및 Folkman 이론의 명제 합성—. 근관절건강학회지, 4(2), 197-220.

김재엽, 이동은, & 정윤경 (2013a). 학업스트레스가 청소년 비행행동에 미치는 영향과 우울의 매개효과. 한국아동복지학, 41, 101-123.

김재엽, 이동은, & 정윤경 (2013b). 청소년 스트레스가 우울에 미치는 영향에 자원봉사활동의 조절효과. 한국청소년연구, 24(3), 99-126.

김정미 (2014). 청소년의 학교스트레스와 우울의 관계에서 낙관성과 지각된 부모공감의 중재효과. 청소년학연구, 21(4), 203-225.

김정원 & 신은영. (2001). 청소년의 스트레스 대처 방식과 성격과의 관계. 교육발전연구, 17(단일호), 55-69.

김조자, 허혜경, 강덕희, & 김보환 (2004). 심리사회적 중재가 간호대학생의 스트레스 지각, 대처방법, 스트레스 반응에 미치는 효과. 성인간호학회지, 16(1), 200, 90-101.

김현순 (2014). 청소년의 학업스트레스와 우울 간의 관계에서 자아존중감의 종단매개효과 검증. 청소년학연구, 21(3), 409-437.

남지경 & 박진희 (2004). 대학무용수의 사회적 지지와 스트레스 대처 방식에 관한 연구. 한국스포츠리서치, 15(6), 373-382.

노충래 & 김설희 (2012). 중학생의 학업스트레스와 학업성적이 심리적안녕감에 미치는 영향. 한국아동복지학, (39), 39-68.

대한신경정신의학회 (1998). 신경정신과학. 서울: 하나의학사.

문경숙 (2008). 청소년의 학업스트레스와 정신건강: 자기통제 및 감정조절의 역할. 아동학회지, 29(5), 285-299.

문도원, 신명옥, & 이정미 (2017). 청소년의 스트레스와 생활만족도의 관계에서 가족친밀도와 정서조절의 다중매개효과. 미래청소년학회지. 14(2), 69-92.

문미란 (2017). 청소년의 회복탄력성 관련 위험요소와 보호요소. 한국청소년상담학회지, 2(1), 37-62.

박광배 & 신민섭 (1991). 고등학생의 지각된 스트레스와 자살 생각. 한국심리학회지: 임상, 10(1), 298-314.

박순아 & 성경미 (2016). Lazarus와 Folkman의 스트레스 평가-대처 모델에 근거한 입원 스트레스 관리 프로그램이 조현병 환자의 스트레스, 문제해결능력 및 삶의 질에 미치는 영향. Journal of Korean Academy of Nursing, 46(4), 583-597.

박영숙 (2009). 청소년 자살사고의 보호요인과 위험요인: 인문계 및 실업계 고등학생의 학교생활 스트레스, 우울, 부모관계, 친구관계 및 자살사고와의 관계. 한국청소년연구, 20(3), 221-251.

박영신 & 김의철 (1998). 청소년 비행과 성취행동: 가정환경, 귀인양식, 건강과의 관계를 중심으로. 한국심리학회지: 사회문제, 4(1), 29-53.

박영신 & 김의철 (1999). 실패와 미래성취에 대한 의식: 토착심리학적 접근. 교육학연구, 37(3), 139-172.

박영신 & 김의철 (2016). 한국인의 스트레스: 토착심리 탐구. 파주: 교육과학사.

박원우, 고동운, & 윤은성 (2010). 연구의 인과성 제고: 통제변수의 의의, 활용 현상 분석 및 제언. 노사관계연구, 21, 1-49.

박은희 (2012). 청소년의 자기효능감이 소비행동과 소비생활 단원에 대한 학습효과에 미치는 영향. 대한가정학회지, 50(7), 1-12.

박재연 & 정익중 (2010). 인문계 고등학생의 학업문제가 자살생각에 미치는 영향—개인수준의 위험요인과 보호요인의 매개역할을 중심으로. 한국아동복지학, 32, 69-97.

박지원 (1985). 사회적 지지척도 개발을 위한 일 연구. 연세대학교 박사학위논문, 110-115.

박현선, 김정은, 박지명 (2014). 부모 유대감 변화가 청소년기 학업 스트레스 변화양상에 미치는 영향. 청소년학연구, 21(9), 123-145.

박희현, 김진아, & 한귀례 (2014). 중학생이 지각한 부모양육방식이 정서문제에 미치는 영향: 자아탄력성의 매개효과. 한국놀이치료학회지(놀이치료연구), 17(3),

345-362.

배희진 (2016). 청소년기 교사학생관계와 우울 간의 자기회귀 교차지연 효과 검증. 계명대학교 석사학위 논문.

서봉언 (2009). 가정 내 사회적 자본과 자아개념이 청소년 비행에 미치는 영향. 경북대학교 석사학위논문.

서정미 & 김은실 (2018). 게임놀이를 이용한 학업스트레스 감소 프로그램이 중학생의 학업스트레스 감소에 미치는 효과. 코칭연구, 11(2), 45-65.

서초구립 반포종합사회복지관 연구지원팀 & 서울대학교 실천사회복지연구회-Praxis (2004). 실천가와 연구자를 위한 사회복지 척도집. 서울: 사회복지 전문출판 나눔의집.

손안나 (2012). 아동의 학업스트레스가 우울에 미치는 영향에서 부정적 자동적 사고의 매개효과. 경원대학교 석사학위 청구논문.

송현옥 (2009). 청소년기의 자아정체감에 영향을 미치는 관련 변인 간의 구조분석. 계명대학교 박사학위논문.

송현옥, & 박아청. (2009). 청소년기의 자아정체감에 영향을 미치는 관련 변인 간의 구조분석. *교육심리연구*, *23*(2), 297-321.

신건호 & 김상수 (2017). 보육교사의 직무만족과 이직의도의 관계에서 자기효능감의 조절효과 분석. 디지털융복합연구, 15(1), 403-412.

신민정, 정경미, & 김은성 (2012). 한국 청소년들의 우울 및 불안에 대한 성차 연구: 발현시기와 연령별 변화를 중심으로. 한국심리학회: 임상, 31(1), 93-114.

신현희 (2017). 부모의 양육태도가 청소년 우울에 미치는 영향: 자아존중감의 매개효과를 중심으로. 한남대학교 석사학위논문.

신효정 & 이문희 (2011). 진로성숙 발달에 관한 4년 종단 연구. 청소년학연구, 18(7), 139-161.

심현애 & 김경연 (2014). 중학교 3학년생의 진학 고등학교 유형 결정 요인에

관한 연구. 중등교육연구, 62(4), 593-621.

안혜원 (2008). 청소년의 스트레스와 문제행동의 관계에서 부모애착 및 부모감독의 중재효과. 숙명여자대학교 석사학위논문.

양명희 (2000). 자기조절학습의 모형 탐색과 타당화 연구. 서울대학교 박사학위논문.

양원영, 원희랑, & 김준홍(2013). 인문계 고등학생의 입시스트레스와 자살생각과의 관계- 우울에 따른 매개효과. 청소년시설환경, 11(2), 59-73.

연합뉴스, "왕따 학생도, 해외 유학생도 '고마워요, 사이버 상담'". 2012. 2. 29. https://www.yna.co.kr/view/RPR20120229000800353?section=press-relase/index (2018. 11. 20).

염상석 (2012). 난타활동이 청소년의 자기효능감 증진과 스트레스 해소에 미치는 효과. 청소년문화포럼, 31(1), 31-58.

염행철 & 조성연 (2007). 청소년의 스트레스와 생태학적 변인과의 관계. 청소년복지연구, 9(2), 1-21.

오보영 & 이상희 (2013). 한국 대학생의 진로정체감 지위에 따른 진로태도성숙, 자아존중감, 우울 및 대학적응의 차이: VISA (Vocational Identity Status Assessment) 모형을 중심으로. 진로교육연구, 26(1), 47-67.

오상석 & 박오원 (2017). 자기감시성향과 조질몰입과의 관계: 주효과 및 자기효능감과 거래적 계약의 조절효과. 산업혁신연구, 33(4), 289-312.

오선영 (2012). 청소년의 생활 스트레스와 우울감의 관계에 있어서 정서적 지지의 조절효과. 순천향대학교 석사학위논문.

오세현 & 강현아 (2018). 청소년의 우울이 진로정체감에 미치는 영향: 팬덤 활동의 매개효과를 중심으로. 학교사회복지, 42, 163-185.

이근영, 최수찬, 공정석 (2011). 부모-자녀간 역기능적 의사소통과 학업스트레스가 청소년의 자살생각에 미치는 영향. 청소년학연구, 18(5), 83-107.

이임선, 천성문, & 박명숙 (2015). 집단문학치료 프로그램이 우울성향 청소년의 우울, 자기효능감 및 또래관계에 미치는 효과. 교육치료연구, 7(2), 209-227.

유창민, 강상경, & 김성용. (2014). 청소년기 학업스트레스가 내재화, 외현화에 미치는 영향: 자기효능감의 매개역할과 성별차이. 사회복지연구, 45(3), 237-262.

윤명숙, 조혜정, & 이현희 (2009). 청소년의 학업스트레스 및 또래애착이 우울에 미치는 영향: 인터넷 사용과 음주행위의 매개효과를 중심으로. 사회과학 연구, 25(2), 131-156.

이경숙, 김정호 (2000). 학업스트레스 대처훈련이 고등학생의 학업스트레스와 학업성취에 미치는 효과. 한국심리학회지: 5(1), 43-59.

이경숙, 정영란, & 하은희 (2002). 스트레스 관리 프로그램이 정신질환자의 스트레스 지각, 대처에 미치는 효과. 임상간호연구, 8(1), 37-57.

이경희 (1996). 청소년의 스트레스에 관한 연구. A study on main stress of adolescence. 숙명여대 박사학위논문.

이봉주, 문혜진, & 김정은 (2014). 교육복지투자우선지역 지원사업의 학업성취 효과 종단적 분석. 아동복지학회, 45, 161-190.

이봉주, 손선옥, & 김윤지 (2015). 아동청소년 학교생활스트레스가 우울에 미치는 영향과 자아존중감의 조절효과. 학교사회복지, 31(0), 37-58.

이은희, 최태산, & 서미정 (2000). 남녀 청소년들의 우울에 미치는 학교스트레스, 자아존중감, 부모-자녀 의사소통 및 부모의 내재적 지원의 효과. 한국심리학회지: 상담 및 심리치료, 12(2), 69-84.

이재혁 (2018). 청소년의 스트레스와 진로성숙도의 발달궤적: 자기효능감의 종단적 매개효과. 한국상담대학원대학교 석사학위논문.

이충섭 (2014). 청소년 복싱선수들의 인지평가와 수행전략의 관계에서 정서의 매개효과. 한국스포츠심리학회지, 25(1), 77-88.

이향종 (2016). 청소년의 스트레스와 우울 간의 관계에서 인지적 정서조절전략, 낙관성 및 사회적 지지의 조절효과. 가천대학교 박사학위논문.

이희선 & 선우현정 (2011). 부모-자녀간 의사소통 유형, 청소년 자아탄력성, 그리고 스트레스 대처방식 간의 관계: 청소년 자아탄력성의 매개효과 검증. 대한가정학회지, 49(6), 109-122.

임광훈 (2012). 청소년의 학교스트레스와 우울과의 관계에서 자아존중감의 매개효과. 대구대학교 석사학위논문.

임성택, 김진호, & 정의석 (2011). 청소년의 생활스트레스와 우울의 관계에 대한 완벽성향의 조절효과. 청소년복지연구, 13(3), 243-260.

임주현 & 정남운 (2003). 역기능 완벽주의: 인지세트, 대처방식 및 심리적 부적응과의 관계. 사회과학연구 19, 221-240.

장덕희 & 신명옥 (2016). 아동의 스트레스가 생활만족도에 미치는 영향: 가족친밀도와 정서조절을 매개로. 청소년복지연구, 18(1), 133-157.

정은선 (2008). 부모의 양육태도가 주관적 행복감과 우울감에 미치는 영향: 강인성 과 완벽주의 매개효과. 한양대학교 박사학위논문.

정화실 (2009). 초등학생의 모애착과 학교생활적응이 낙관성에 미치는 영향. 단국대학교 석사학위논문.

조은서 & 김은영 (2018). 학업스트레스 척도 개발 및 타당화. 청소년학연구, 25(6), 135-167.

조현영 (2017). 배우자관계만족도와 자녀관계만족도가 노인 우울에 미치는 영향 및 성별의 조절효과. 서울대학교 석사학위논문.

최인재 & 이기봉 (2010). 한국 청소년 지표 조사 Ⅴ : 청소년 건강실태 국제비교 조사 (한•미•일•중 4개국 비교). 한국청소년정책연구원 연구보고서, 1-142.

최인재, 이기봉, & 이한나 (2010). 한국 청소년 지표 조사 V- 청소년 건강실태 국제비교 조사. 서울: 한국청소년정책연구원.

한국청소년정책연구원 (2017). 한국아동청소년패널조사 초4 6차년도 (2015) 데이터.

한숙원 & 이명선 (2004). PTCA 시술 환자의 인지적 평가와 위험요인수정행위. 성인간호학회지, 16(4), 556-565.

한정선 & 김세영 (2006). 중학생의 인터넷 중독 수준에 따른 인터넷 활용 유형, 자기 통제력, 자기조절학습능력 및 학업성취도의 차이. 교육정보미디어연구, 12(2), 161-188.

허묘연 (2000). 청소년이 지각한 부모 양육행동 척도개발연구. 이화여자대학교 박사학위논문.

홍광식, 강안 효 홍(Takahiro Okayasu), 진전창 (Akira Tsuda) (1994). 학교 스트레스의 비교연구—한국과 일본의 초 중학생을 중심으로—. 한국초등교육연구, 8(0), 95-108.

황동주 & 김진호 (2016). 청소년 멘토링활동이 청소년멘토의 자기효능감과 사회적 기술에 미치는 영향. 청소년문화포럼, (45), 137-164.

황여정 (2008). 고등학생의 학업 스트레스 지각수준에 영향을 미치는 요인. 한국청소년연구, 19(3), 85-114.

Aiken, L.S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, California: Sage Publications.

Ang, R. P. & Huan, V. S. (2006). Relationship between academic stress and suicidal ideation: Testing for depression as a mediator using multiple regression. Child Psychiatry Human Development, 37, 133-143.

Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. Journal of Youth and Adolescence, 16(5), 427– 454.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191-215.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W. H. Freeman.

Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.

Beck, A. T. (1967). Depression: Clinical, experimental, and theoretical aspects. New York: Harper & Row.

Beck, A. T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Belle, D. & Longfellow, C. (1984). Confiding as a coping strategy. Unpublished manuscript, Boston University.

Brannick, M. T. (2018). Control Variables. In The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation. By Bruce B. Frey (Ed.). SAGE Publications.

Cantwell. D. & Baker, L. (1991). Manifestations of depression affect in adolescence. Journal of Youth and Adolescence, 20(2), 121-133.

Chapman, J. A., Denholm, C., & Wyld, C. (2008). Social support as a factor inhibiting teenage risk-taking: Views of students, parents and professionals. Journal of Youth Studies, 11(6), 611-627.

Cicchetti, D. & Rogosch, F. A. (1997). The role of self-organization in the promotion of resilience in maltreated children. Development and Psychopathology, 9, 799-817.

Crandall, V. C., Katkovsky, W., & Crandall, V. J. (1965). Children's beliefs in their control of reinforcement in intellectual academic achievement. Child Development, 36, 91-109.

Dallaire, D. H., Pineda, A. Q., Cole, D. A., Ciesla, J. A., Jacquez, F. M., LaGrange, B., et al. (2006). Relation of positive and negative parenting to children's depressive symptoms. Journal of Clinical Child and Adolescent Psychology, 35(2), 313-322.

DeLongis, A., Coyne, J. C., Dakof, G., Folkman, S., & Lazarus, R. S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. Health Psychology, 1(2), 119-136.

Denny, S., Clark, T. C., Fleming, T., & Wall, M. (2004). Emotional Resilience: Risk and protective factors for depression among alternative education students in New Zealand. American Journal of Orthopsychiatry, 74(2), 137-149.

Frydenberg, E. (2008). Adolescent coping: Advances in theory, research, and practice. New York: Routledge.

Gaber, J. (2010). Face Validity. In the Encyclopedia of Research Design. By Neil J. Salkind (Ed.). SAGE Publications: CA.

Garber, J., Miller, S. M., & Abramson, L. Y. (1980). On the distinction between anxiety and depression: Perceived control, certainty, and the probability of goal attainment. In J. Garber & M. E. P. Seligman (Eds.), Human helplessness: Theory and applications. New York: Academic Press.

Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19(2), 157-165.

Hofheinz, R. Jr. & Calder, K. E. (1982). The Eastasia edge. New York: Basic Books.

Hopman, J. A. B., Tick, N. T., van der Ende, J., Wubbels, T., Verhulst, F. C., Maras, A., Breeman, L. D., & van Lier, P. A. C. (2018). Special education teachers' relationships with students and self-efficacy moderate associations between classroom-level disruptive behaviors and emotional exhaustion. Teaching and Teacher Education, 75, 21-30

Johnson, J. H., & Sarason, I. G. (1979a). Moderator variables in life stress research. In I. G. Sarason & C. D. Spielberger (Eds.), Stress and anxiety (Vol. 6). Washington, DC: Hemisphere.

Johnson, J. H., & Sarason, I. G. (1979b). Recent developments in research on life stress. In V. Hamilton & Warburton (Eds.), Human stress and cognition: An information processing approach. London: Wiley.

Jose, P. E. (2013). Doing Statistical Mediation and Moderation. New York: The Guilford Press.

Kahn, R. L. (1979). Aging and Social Support. In Aging from Birth to Death: Interdisciplinary Perspectives, ed. By M. W. Riley. (American Association for the

Advancement of Science, Selected Symposium No. 30) Boulder, Co: Westview Press, 77-91.

Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparisons of two modes of stress measurement: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4(1), 1-39.

Kaplan, B. H., Cassel, J. C., & Gore, S. (1977). Social Support and Health. Medical Care, 15(5) (Suppl.), 47-58.

Kaul, M. & Lakey, B. (2003). Where is the support in perceived support? The role of generic relationship satisfaction and enacted support in perceived support's relation to low distress. Journal of Social and Clinical Psychology, 22(1), 59–78.

Kemper, T. D. (1978). A social interactional theory of emotions. John Wiley & Sons.

Kim, J. E., Epstein, N. B., & Moon, U. J. (2016). Self-efficacy and Perceived Parental Support/Affection as Mediators of Stressor Risk Factors for Adolescent Internet Addiction in South Korea. Family and Family Therapy, 24(4), 483-504.

Lazarus, R. S. & Cohen, J. B. (1977). Environmental stress. In I. Altman and J. F. Wohlwill (Eds.), Human behavior and the environment: Current theory and research. New York: Plenum.

Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York, NY, US: Springer.

Lee, M. & Larson, R. (2000). The Korean 'examination hell': Long hour of studying, distress, and depression. Journal of Youth & Adolescence, 29(2), 249-271.

Malik, M. A. R., Butt, A. N., & Choi, J. N. (2015). Rewards and employee creative performance: Moderating effects of creative self-efficacy, reward importance, and locus of control. Journal of Organizational Behavior, 36(1), 59-74.

Nogales-Gonzalez, C., Romero-Moreno, R., Losada, A., Marquez-Gonzalez, M., & Zarit, S. H. (2015). Moderating effect of self-efficacy on the relation between behavior problems in persons with dementia and the distress they cause in caregivers. Aging and Mental Health, 19(11), 1022-1030.

Norbeck, J.S., Lindsey, A., & Carrieri, V. (1981). The Development of an Instrument to Measure Social Support. Nursing Research, 30(5), 264-269.

Pauley, P. M. & Hesse, C. (2009). The Effects of Social Support, Depression, and Stress on Drinking Behaviors in a College Student Sample. Communication Studies, 60(5) 493-508.

Pintrich, P. R., & DeGroot, E. (1990, April). Quantitative and qualitative

perspectives on student motivational beliefs and self-regulated learning. In Annual Meeting of the American Educational Research Association, Boston, MA (Vol. 128).

Raskauskas, J., Rubiano, S., Offen, I., & Wayland, A. K. (2015). Do social self-efficacy and self-esteem moderate the relationship between peer victimization and academic performance? Social Psychology of Education, 18(2), 297-314.

Reinherz, H. Z., Giaconia, R. M., Hauf, A. M. C., Wasserman, M. S., & Paradis, A. D. (2000). General and specific childhood risk factors for depression and drug disorders by early adulthood. Journal of the American Academy of Child & Adolescent Psychiatry, 39(2), 223-231.

Reivich, K., & Shatte, A. (2002). The resilience factor. New York, NY: Broadway Books.

Rosenberg, M. (1965). Society and adolescent self-image. NJ: Princeton Press.

Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The social support questionnaire. Journal of Personality and Social Psychology, 44(1), 127-139.

Schaefer, C., Coyne, J. C., & Lazarus, R. S. (1982). The health-related functions of social support. Journal of Behavioral Medicine, 4(4), 381-406.

Schraml, K., Perski, A., Grossi, G., & Simonsson-Sarnecki, M. (2011). Stress symptoms among adolescents: The role of subjective psycho-social conditions, life style, and self-esteem. Adolescence, 34, 987-996.

Schwoerer, C. E., & May, D. R. (1996). Age and work outcomes: The moderating effects of self-efficacy and tool design effectiveness. Journal of Organizational Behavior, 17(5), 469-487.

Schunk, D. (1991). Self-efficacy and Academic Motivation. Educational Psychologist, 26(3-4), 207-231.

Sherer, M., Maddox., J. E., Mercamdante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The Self-Efficacy Scale: Construction and validation. Psychological Reports, 51(2), 663-671.

Tamura, T. (2018). Effect of Perceived Parent-Child Relationship in Childhood on Resilience in Japanese Youth. Psychological Reports, 0(0), 1-21.

Thoits, P. (1982). Conceptual, Methodological and theoretical problems in studying social support as a buffer against life stress. Journal of Health and Social Behavior, 23, 145-139.

Tsai, K. M., Dahl, R. E., Irwin M. R., Bower, J. E., McCreath, H., Seeman, T. E.,

Almeida, D. M., & Fuligni, A. J. (2018). The Roles of Parental Support and Family Stress in Adolescent Sleep. Child Development, 89(5), 1577-1588.

Weiner, B. (Ed.). (1974). Cognitive views of human emotion. New York: Academic Press.

Weiner, B., Graham, S., & Chandler, C. (1982). Pity, anger, and guilt: An attributional analysis. Personality and Social Psychology Bulletin, 8(2), 226-232.

Weiner, B., Russell, D., & Lerman, D. (1978). Affective consequences of causal ascriptions. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), New directions in attribution research, Volume 2, 59-90. Hillsdale, NJ: Erlbaum.

Weiner, B., Russell, D., & Lerman, D. (1979). The cognition–emotion process in achievement-related contexts. Journal of Personality and Social Psychology, 37(7), 1211-1220.

Wilks, S. E. (2008). Resilience amid academic stress: The moderating impact of social support among social work students. Advances in Social Work, 9(2), 1-20.

Wood, R. E., & Locke, E. A. (1987). The relation of self-efficacy and grade goals to academic performance. Educational and Psychological Measurement, 47(4), 1013-1024.

Woods, M. (1972), The unsupervised child of the working mother, Developmental Psychology, 6(1), 14-25.

Wrubel, J., Benner, P., & Lazarus, R. S. (1981). Social competence from the perspective of stress and coping. In J. Wine & M. Syme (Eds.), Social competence. New York: Guilford.

Xie, D. (2007). Buffering or strengthening: The moderating effect of self-efficacy on stressor-strain relationship. Journal of Career Assessment, 15(3), 351-366.

York, R. (2018). Control variables and causal inference: a question of balance. International Journal of Social Research Methodology, 21(6), 675-684.

국문 초록

청소년의 학업 스트레스와 우울의 관계 연구: 인식된 자기효능감과 부모 지지의 조절 효과

박 숙 영
사회복지학과
서울대학교 대학원

이미 많은 연구로 청소년 학업스트레스와 우울의 관계가 밝혀졌지만, 우리나라의 학벌주의로 인한, 청소년기 학업스트레스 때문에 발생하는 우울에 대한 해결책을 사회적 차원에서 찾기에는 부족한 실상이다. 따라서 개인적 차원의 해결책을 마련하도록 이론•실천적 함의를 이끌어내기 위해, 인식된 자기효능감과 부모 지지 두 가지 변수 모두 학업스트레스-우울 관계에 있어 조절효과를 가지는지를 살펴보고자 하였다. 연구대상을 중학교 3학년으로 정했는데, 그 이유는 종단적 연구에 의하면 중학교 3학년이 청소년기 중에 우울 수준이 가장 높고, 부모 관련 스트레스 수준도 가장 높으며, 아울러 자기효능감 수준이 가장 높은 시기이기 때문이다. 이론적 틀로 Lazarus와 Folkman (1984) 의 스트레스와 평가, 그리고 대처에 관한 인지 이론을 사용했다. 스트레스, 평가, 대처, 정서, 사기 중에 대처 및 정서 단계를 제외하고 모두 본 연구에 적용했다. 단, 선행 연구 중에 인식된 부모 지지가 조절효과를 가지지 못한다는 부분적인 결과가 있는 연구도 존재했다. 본 연구는 한국청소년정책연구원에서 실시한 한국아동청소년패널조사 초4코호트 제6차(2015년) 자료를 사용했다. 총 2,061명의 중학교3학년 학생들이 설

문에 응답했다. 연구결과는 다음과 같다. 첫째, 학업스트레스와 우울은 유의미한 관계가 있다. 둘째, 자기효능감은 학업스트레스와 우울의 관계에서 유의미한 조절효과를 갖는다. 셋째, 부모 지지는 학업스트레스와 우울의 관계에서 유의미하지 않은 조절효과를 갖는다. 셋째 연구결과가 보여주는 사실은, 선행연구에서는 인문계 고등학생 집단과 높은 스트레스 수준을 가진 집단에서는 부모 지지가 조절효과를 가지지 못한다는 점을 비추어볼 때, 전반적으로 높은 스트레스 수준을 가진 집단이 부모 지지의 조절효과를 보지 못할 것이라는 점이다. 또한 중학교3학년이 자기효능감과 부모스트레스가 가장 높은 학년이라는 점을 본 연구의 결과와 연결시킬 수 있다.

주요어: 우울, 학업스트레스, 인식된 자기효능감, 인식된 부모 지지, 조절 효과, 스트레스-대처 이론
학 번: 2016-28652

Acknowledgments

I would like to acknowledge God's sovereign power, love, grace, righteousness, and mercy over everything in my life. He has helped me every time I have needed Him. Jesus is truly my advocate and I owe my life to Him.

I would like to thank my advisor, Professor Bong-joo Lee and the members of the Committee—Professor Joan Yoo and Professor Yoon-sun Han. Without your support, feedback, and wisdom, I would not have been able to complete this master's degree program. I would also like to acknowledge the support, teaching, and advice I have received from the professors at Seoul National University's Department of Social Welfare.

I would like to thank my family—my mother, father, and brother, and Noble, my fiancé. My mother's invaluable advice and support have brought me through challenging times, as have love from my family altogether. Noble, you have loved me and given yourself for me. You have been a light in the darkness. Thank you.

To my spiritual family, New Philadelphia Church, including Pastor Susy, Pastor David and Seojung, Pastor JP, my house church, the Kingdom First Prayer Tabernacle team, and friends from NP Itaewon, especially Tammi and Youme—you have been strength in my weakness and hope where there was little. Thank you for your prayers, friendship, care, and time. A special shout out to Isaac Teo for help with revising.

To the rest I have not mentioned, I owe you gratefulness also.